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CONTENTS

FEATURES

4

Sariska Tiger Reserve: From Silence to Revival, and Hope
Once silent after losing every tiger, Sariska now resonates with hope. Sariska's remarkable journey is told by its Field Director – **Sangram Singh Katiyar** – reflects on the reserve's extraordinary revival, revealing how perseverance, science, and people together restored one of India's most inspiring conservation landscapes.

10

Magical Melghat
Kishor Rithe recounts Melghat's extraordinary journey from a remote tiger reserve to a conservation success. Blending personal experiences with five decades of history, he chronicles the reserve's remarkable evolution, revealing how dedicated people, sound science, and community support overcame daunting challenges to safeguard this iconic tiger landscape.

OTHERS

19 Book Reviews
23 Builders and Guardians
26 Remembrance
34 Sentinels
38 Nature Watch
42 Conservation Notes

Editorial

Hornbill is India's oldest magazine dedicated to wildlife and forests. Launched in 1976 as a quarterly publication, it has, over the past 50 years, taken on several perspectives, reflecting the evolving landscape of conservation and communication.

Today, we find ourselves in the era of Gen Z – a generation whose strength, vision, and commitment to conservation we at BNHS deeply recognize. Gen Z is redefining environmental protection by blending digital activism, sustainable consumer habits, and intersectional justice. They harness the power of social media to mobilize peers, advocate for climate-friendly policies, and build startups that challenge wasteful industries. Their approach is creative, urgent, and community-driven.

This is a pivotal moment. It is time that we embrace the unique ways in which Gen Z exchanges ideas and takes action, allowing them to shape conservation in their own voice and style. *Hornbill* continues to be a platform that celebrates this spirit, bridging generations while championing India's natural heritage.

Project Tiger was launched in 1973 and has now completed more than five decades. Our new series of articles on Tiger Reserves has received tremendous appreciation from our readers. Following the encouraging response to the feature on Corbett Tiger Reserve, this issue takes you to Maharashtra's "Magical and Mysterious" Melghat Tiger Reserve.

Most of us visit wildlife reserves only for a few days. In that sense, our forest officers and frontline staff are truly fortunate to spend extended periods in these forests and witness rare moments of wilderness that few others ever experience. During my visit to Sariska Tiger Reserve, I requested the Field Director, Mr Sangram Singh Katiyar, to share some of these untold stories with BNHS members and *Hornbill* readers. You will be fascinated to learn how the tireless efforts of forest officers and frontline staff helped restore the tiger population in Sariska.

The 'Book Reviews' section of *Hornbill* continues to connect readers with remarkable authors and their works. This issue introduces WILD HABITATS IN NORTH EAST INDIA by Anwaruddin Choudhury, reviewed by Dr Asad R. Rahmani. A review, by Romulus Whitaker, of THE DRIFT – JUNGLE STORIES OF A BANKER by A.K. Sahay, is sure to tempt you to add this engaging book to your collection.

For several decades, the 10-volume HANDBOOK OF THE BIRDS OF INDIA AND PAKISTAN by Dr Sálim Ali and Dr S. Dillon Ripley has been the definitive authority on our region's avifauna. Now, the Bombay Natural History Society is launching a monumental project: revising and expanding this classic into the HANDBOOK OF THE BIRDS OF INDIA (AND SOUTH ASIA) – in both print and continuous digital e-pages!

Participation is open to all current and prospective BNHS members and associate members across South Asia. Join our official Facebook Revision Group today at Handbook – BNHS Revision Project: to contribute your field observations to this landmark project.

In the 'Builders and Guardians' section, BNHS Honorary Secretary Dr Bharat Bhushan introduces Sir George Ambrose Lloyd, 1st Baron Lloyd (1879–1941), who served as the eighth President of the Bombay Natural History Society from 1918 to 1923 while also serving as the Governor of the Bombay Presidency in British India. The article also profiles Sir Leslie Orme Wilson (1876–1955), the ninth President of BNHS, who served as Governor of Bombay from 1923 to 1926 before becoming Governor of Queensland, Australia, from 1928 to 1946. You will surely feel proud that our Society was guided by such distinguished personalities.

It is with deep sadness that we mark the loss of one of India's finest nature artists, Mr Jamshed P. Irani. His work was admired even by Dr Sálim Ali, who recognized the brilliance of his bird illustrations. Many of his artworks grace the pages of BNHS publications, standing as timeless contributions to the study and celebration of India's wildlife. Visitors to Hornbill House continue to admire his remarkable paintings, created with his left hand, which inspire awe to this day. His artistry was not only a visual delight but also a powerful tool for conservation, bringing the beauty of nature closer to people's hearts.

For readers wishing to explore more of his legacy, BNHS published a special issue of the *Hornbill* in 2016, titled *Wildlife Artists Special*, highlighting his contributions and the role of art in environmental awareness. Mr Irani's work remains a lasting reminder of how creativity and conservation can walk hand in hand. The many tributes in this issue, written by those who knew him closely, will help you appreciate many more facets of his remarkable life.

In the Sentinel section, Devi Waigankar and Dr Unmesh Katwate highlight the efforts of a Bharat Mallav – Chairman of the Ambika Fisheries Cooperative Society, senior journalist with *Pudhari* Marathi – working locally to protect the fisheries and wetland ecosystem of Ujani Reservoir, whose habitat and fish resources are increasingly threatened by habitat degradation and growing human pressures.

In the 'Nature Watch' section, the article *Trogon Yatra* by Vijaya Bharat will inspire you to explore the forests of Kerala, West Bengal, the Himalaya, and the Northeastern states in search of the three Indian species of the genus *Harpactes*: the Malabar Trogon *Harpactes fasciatus*, Ward's Trogon *Harpactes wardi*, and the Red-headed Trogon *Harpactes erythrocephalus*.

Under the mounting pressure of infrastructure development, many biodiversity-rich landscapes of the Western Ghats are crying out for both legal and physical protection. Yet, four of the six states have strongly resisted bringing certain ecologically sensitive regions under Eco-Sensitive Area (ESA) status. Conservationists continue to advocate for this recognition, while state governments remain engaged in prolonged discussions with the Union Government over the designation of these critical landscapes.

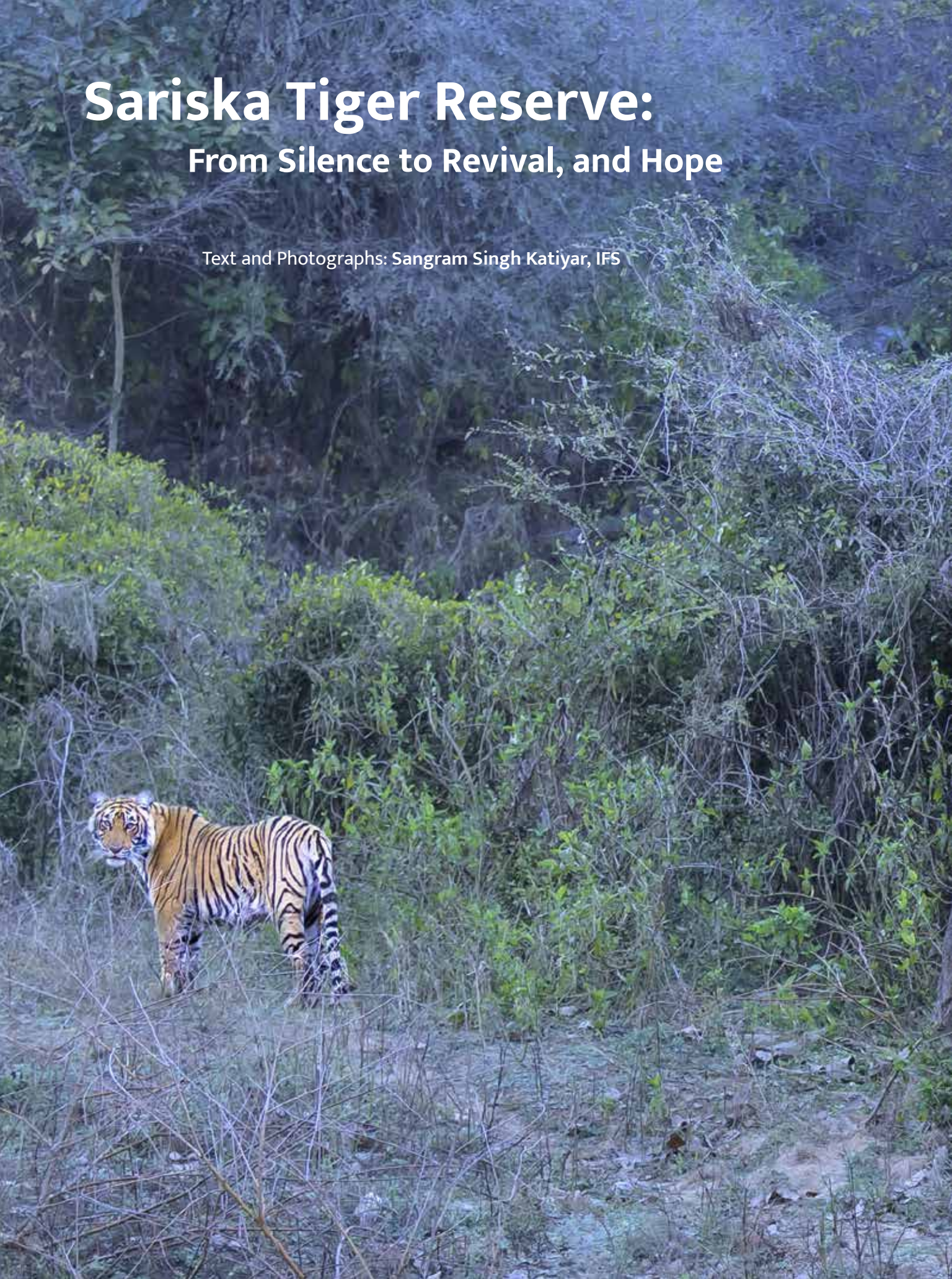
The seventh draft of the gazette notification has now been issued, underscoring the complexity and persistence of this long-standing issue. The Conservation Notes article, *Challenging the Eco-Sensitivity of Sahyadri*, offers valuable insights into the ongoing debate over "Go" and "No-Go" zonation. The decisions taken today will determine the future of our priceless forests – ecosystems that safeguard not only India's ecological security but also its long-term economic well-being.

Kishor Rithe

Sariska Tiger Reserve:

From Silence to Revival, and Hope

Text and Photographs: **Sangram Singh Katiyar, IFS**



Kankwari Fort Panorama – The 17th-century fortress rises above the jungle, once Aurangzeb's prison for Dara Shikoh, now a vantage point for visitors

Each dawn in the Aravalli Hills presents a breath-taking spectacle as the first light of day illuminates the rugged landscape and whispers tales of resilience. As I step into the vast expanse of Sariska Tiger Reserve, I am aware that I am not merely entering a forest; I am stepping into a living narrative of history, struggle, and renewal that unfolds with each passing moment. As a forest manager, Sariska represents both immense responsibility and profound pride. It is a place where the indomitable spirit of nature and the unwavering commitment of people are woven together into a tapestry of resilience and hope.

Sariska's history is a rich mosaic of contrasts and hard-earned lessons. Once the hunting grounds of the rulers of Alwar, the area was declared a wildlife sanctuary in 1955, marking an important recognition of its ecological significance. With the launch of Project Tiger in 1978, Sariska became India's 11th Tiger Reserve. Yet this remarkable journey took a tragic turn in the early 2000s. By 2005, rampant poaching and habitat degradation had driven tigers to local extinction within the reserve, leaving behind an eerie silence that resonated deeply with all of us. That absence became a stark reminder of the fragility of conservation gains and how quickly decades of dedicated effort can be undone.

The dawn of 2008 ushered in renewed hope as Sariska became the site of the world's first tiger reintroduction programme. I vividly remember those tense nights filled with anticipation as we prepared to release relocated tigers from the neighbouring Ranthambore National Park into Sariska's valleys. Every cautious step the animals took held our collective breath, carrying equal measures of anxiety and hope. The birth of cubs in 2012 marked a defining milestone, filling us with immense relief and pride. Today, nearly 50 tigers roam Sariska's rugged 1,213 square kilometres, testament to a remarkable conservation recovery that has earned international recognition. The reserve comprises a core

Tiger Cubs at Play – The most thrilling sight for us: cubs born in Sariska, proof that recovery is real and ongoing

area of 881.11 square kilometres and a buffer zone of 332.23 square kilometres, encompassing undulating hills, deep valleys, and expansive plateaus. Its journey from local extinction to a thriving tiger population has become a benchmark for wildlife restoration.

Yet Sariska's significance extends far beyond its tigers. The forest is a complex mosaic of habitats that supports an extraordinary diversity of life. The hardy dhok, *Anogeissus pendula*, forms nearly 80% of the forest canopy, shaping much of the landscape. The resilient salar, *Boswellia serrata*, clings to rocky slopes, while khair, *Acacia catechu*, flourishes in the valleys. Each spring, palash, *Butea monosperma*, erupts into brilliant orange-red bloom, transforming the forest into a spectacle that never fails to remind me of nature's artistry.

Along seasonal streams, trees such as mango *Mangifera indica*, jamun *Syzygium cumini*, and tamarind *Tamarindus indica* provide food and shelter for

Top: Vultures on Cliffs and their roosting on trees – Sanctuary in Sariska's cliffs and nearby trees, a reminder that conservation here extends beyond tigers

Bottom: Sambar deer – Majestic herbivores, vital prey for tigers, grazing calmly under our watch

countless species. This rich habitat supports leopards, striped hyenas, jungle cats, sambar, chital, nilgai, and wild boar, each playing an essential role in the ecosystem. More than 270 bird species have been recorded here, from majestic vultures, including the endangered Red-headed Vulture, to Indian Peafowl, elusive francolins, and elegant paradise flycatchers. The Aravalli Red Spurfowl *Galloperdix spadicea caurina*, endemic to the Aravalli Hills, further highlights the region's unique ecological value. Even reptiles, including the mugger crocodile, find refuge within Sariska's varied habitats.

Yet the path to successful conservation remains challenging. Territorial disputes among tigers are a natural part of maintaining a healthy population, while invasive plants such as *Lantana camara* and *Neltuma juliflora* (formerly *Prosopis juliflora*) spread aggressively, displacing native vegetation and altering habitats. Pilgrimage to the reserve's temples also brings the persistent problem of plastic waste. Around

Top: Ber *Ziziphus* – Native shrubs providing food for herbivores, a quiet but crucial part of the ecosystem

Bottom: Valley Greens – Khair, *Acacia catechu*, and semi-evergreen Mango, Jamun, and Tamarind line streambeds, palm trees offering shade and food for wildlife

Right: Painted Sandgrouse – A splash of colour in semi-arid grasslands, with their striking plumage

Once wiped out, the roar of the mighty tiger of Sariska now echoes in the tiger reserve

150 villages depend on grazing and forest resources, making it one of my greatest responsibilities to balance local livelihoods with long-term conservation.

To monitor tiger movements, we employ GPS collars on the animals along with, camera traps, and drones on land. Yet technology alone cannot safeguard Sariska. The true strength of conservation lies in the unwavering dedication of our frontline staff and the enthusiasm of local volunteers known as *Bagh Mitras*. They guide pilgrims, reduce litter, assist with awareness programmes, and help foster a sense of shared responsibility for protecting the reserve.

Sariska is also far more than a refuge for wildlife; it is a cultural landscape shaped by centuries of history. The 17th-century Kankwari Fort, the revered Pandupole Hanuman Temple, and numerous shrines attract thousands of visitors every year. I see these cultural landmarks not as competing interests but as opportunities to demonstrate that heritage and nature are inseparable. Protecting one strengthens our ability to protect the other.

Every day in Sariska reinforces an enduring lesson: conservation is not driven by enforcement or technology alone. It is ultimately about people – our dedicated forest department staff, local communities, volunteers, and every individual who chooses to value and protect this landscape.

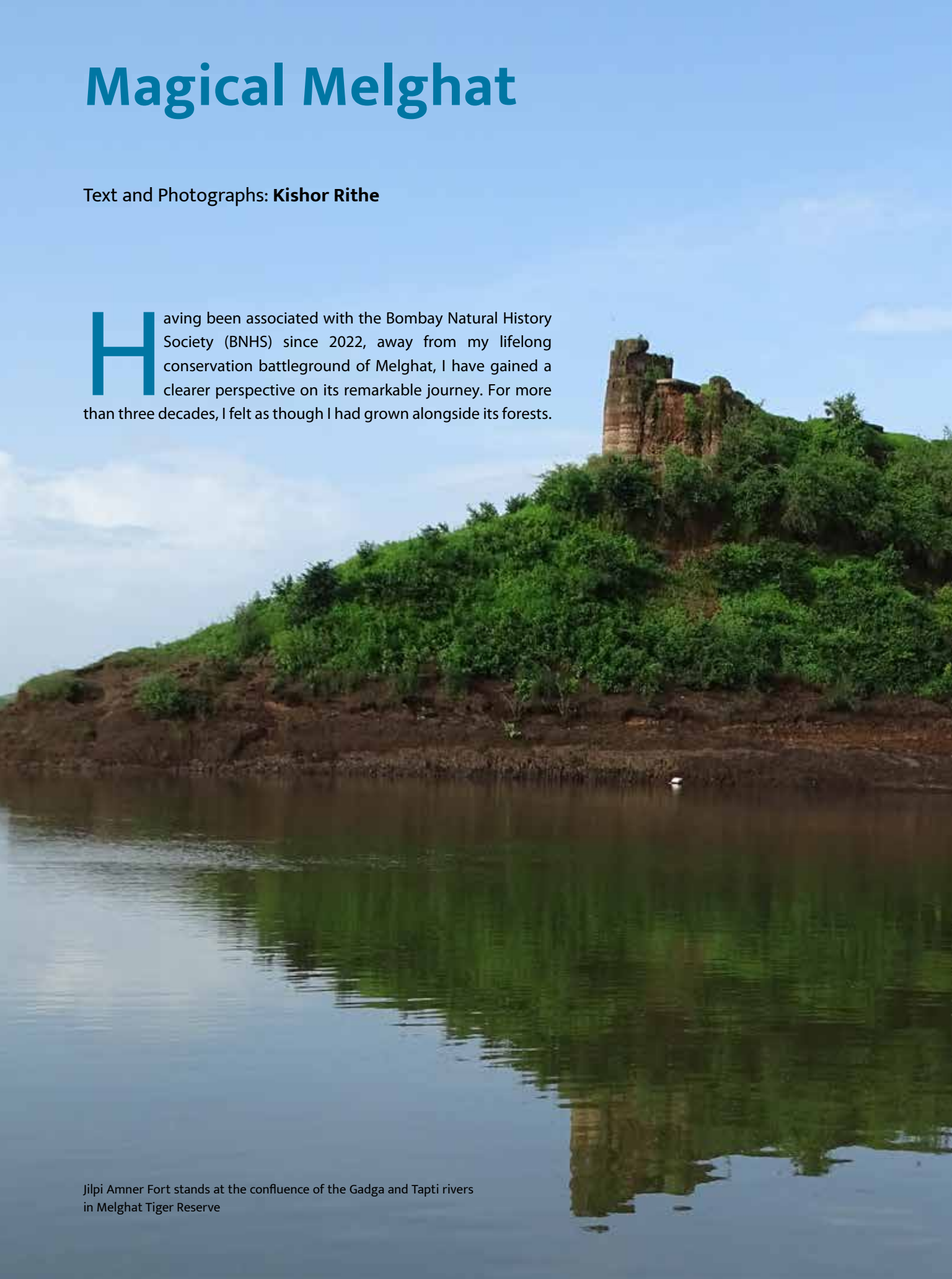
From the profound silence of 2005 to the renewed roar of tigers echoing through its valleys today, Sariska has become a beacon of hope and a powerful symbol of what collective commitment can achieve. To me, it is far more than a protected area. It represents a lasting responsibility and a reminder that even the gravest ecological crises can be overcome through perseverance, collaboration, and unwavering dedication.

Sangram Singh Katiyar, IFS (2011 batch, Rajasthan cadre), has an MSc in Botany, a PG Diploma in Environmental Laws, and serves as Field Director, Sariska Tiger Reserve

Magical Melghat

Text and Photographs: **Kishor Rithe**

Having been associated with the Bombay Natural History Society (BNHS) since 2022, away from my lifelong conservation battleground of Melghat, I have gained a clearer perspective on its remarkable journey. For more than three decades, I felt as though I had grown alongside its forests.

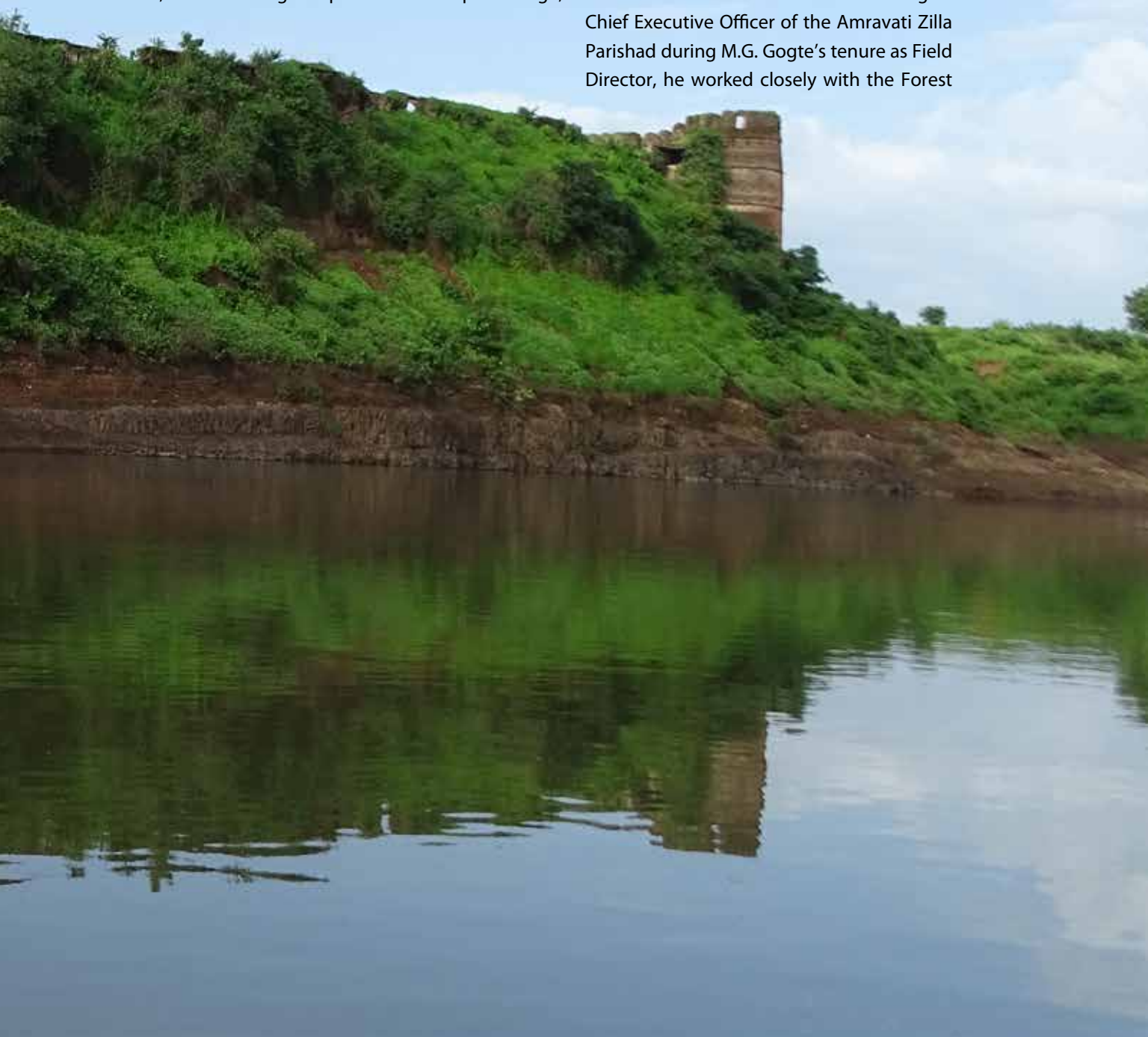


Jilpi Amner Fort stands at the confluence of the Gadga and Tapti rivers in Melghat Tiger Reserve

This summer, I received photographs of tigers from Melghat on WhatsApp almost every other day. They came from nature guides working in the Shahanoor Tourism Zone of southern Melghat and the Harisal Tourism Zone of central Melghat, as well as from visitors exploring these landscapes. Five decades ago, such images would have been unimaginable. The transformation that has taken place since then neither occurred overnight nor came easily. Melghat's revival is a story of vision, perseverance, scientific management, and collective effort.

I first entered the forests of Melghat in 1987. As I drove through the lush valley leading to the Rajanikhora Stream, one of the highest peaks in the Satpura Range, I recalled meeting another great inspiration during my first visit in 1987 – Maruti Chitampalli, then Deputy Field Director of Melghat. More importantly, he taught us the value of rigorous field studies and empirical evidence in wildlife conservation. I owe an enduring debt of gratitude to M.G. Gogte, then Field Director of Project Tiger Melghat (PTM). His address to us on April 26, 1991, inspired a mission that has shaped my life ever since – the conservation of Melghat.

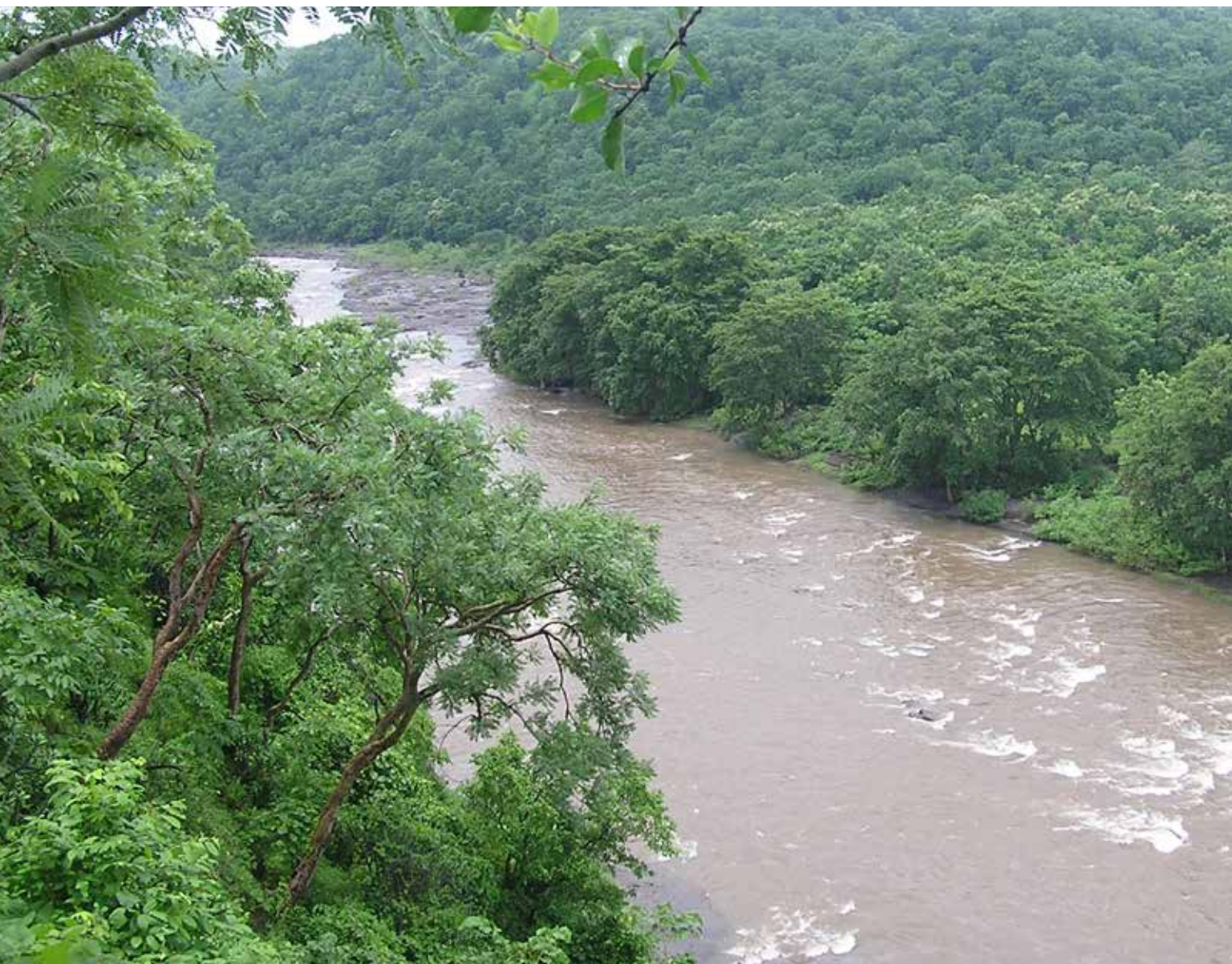
Another mentor was Pravinsingh Pardeshi, from whom I learned a great deal about forest conservation. While serving as Chief Executive Officer of the Amravati Zilla Parishad during M.G. Gogte's tenure as Field Director, he worked closely with the Forest



Department to reduce biotic pressures on Melghat through community participation. Equally inspiring was Shri Bhagwan, a gentle yet determined forest officer. He demonstrated that even sensitive issues such as forest encroachments in western Melghat could be addressed through dialogue, patience, and mutual trust. Together, these mentors transformed me from a nature enthusiast into a committed conservationist.

In 1991, we established the Nature Conservation Society, Amravati (NCSA), which has now worked continuously in Melghat for more than three decades. Community participation has always remained its guiding principle. We have consistently believed that people living in and around forests are the true stakeholders in conservation and that long-term protection of biodiversity is impossible without their active involvement. Over the years, NCSA has developed a community-based conservation model around the MTR. I also remain deeply indebted to dedicated frontline officers such as Forester R.B. Giri, Range Forest Officer Ajay Pillariseth, and Assistant Conservator of Forests/Divisional Forest Officer Ravi Wankhade, whose commitment helped shape the Melghat we see today.

Before describing the conservation challenges that occupied much of my work during the reserve's third decade, it is important to acknowledge the pioneering efforts made during its formative years. Much of this history was shared with me by senior officers, including



The Wan River flows through Wan Wildlife Sanctuary. During the steam engine era, trains stopped here to replenish their water supply. With the railway line now realigned outside the Melghat Tiger Reserve, this remains a part of history

the late Ramesh Ganorkar, Honorary Wildlife Warden from the inception of the reserve, and is also documented in official reports and scientific publications.

Melghat has enjoyed legal protection for well over a century. The Bairagarh and Gugamal forests were first protected under the Berar Forest Act in 1866 and 1876, respectively. On November 25, 1913, the Central Provinces Government declared fifteen forest blocks as Reserved Forests under the Indian Forest Act, 1878. Throughout much of the 20th century, Melghat remained an important stronghold for both tigers and leopards, although official records show that 69 tigers and 114 leopards were legally shot between 1955 and 1970. In June 1969, approximately 381.59 sq. km was notified as the Dhakna–Kolkaz Game Sanctuary. Hunting was subsequently prohibited under the Wild Life (Protection) Act, 1972, and the area was redesignated as Melghat Wildlife Sanctuary in 1974.

The same landscape was selected under Project Tiger in 1972, with the programme formally commencing in 1973. B.R. Koppikar became the first Conservator of Forests and Field Director of Project Tiger Melghat, with headquarters at Paratwada. One of the earliest priorities was the preparation of a scientifically based management plan, which required comprehensive baseline ecological information. Field Director Kafeel Shaikh and V.B. Sawarkar prepared the first five-year management plan for the period 1973–1978.

Early field investigations identified livestock grazing as one of the principal conservation challenges. Tigers killed 80, 71, and 90 cattle during 1973, 1974, and 1975, respectively, prompting the launch of a large-scale rinderpest vaccination programme in 1974. At that time, Project Tiger Melghat contained 54 villages, supporting 11,142 people and 11,547 head of cattle, while an additional 8,000 nomadic cattle grazed seasonally within the reserve. Because of acute water scarcity outside the protected area, this seasonal grazing was temporarily permitted.

Estimating tiger numbers also became an early management priority. The 1975 tiger census, based on the pugmark method then in use throughout India, estimated an average tiger territory of 35 sq. km, a male-to-female ratio of 1:1, and a female-to-cub ratio of 2:1. Leopards were included in the census from 1976 onwards. Surveys covering the Koktu Valley and adjoining Gugamal forests ultimately resulted in the publication of the influential 1979 paper, *Study of Some Aspects of Maintenance of Spatial Relationships in Tigers and Leopards in Melghat Tiger Reserve*, by Kafeel Shaikh and V.B. Sawarkar.

These intensive field exercises familiarised frontline staff with individual animals, many of which acquired names reflecting their territories or personalities. According to official records, vigilant protection ensured that poaching remained virtually absent during the reserve's first decade.

Senior officers, including the Field Director, undertook most patrols on foot because vehicles were scarce. These extensive surveys revealed that water availability, rather than prey abundance, was the principal factor limiting wildlife distribution during the dry season. B.R. Koppikar studied the reserve's drainage systems, river networks, and seasonal water availability, concluding that almost one-quarter of the reserve remained underutilised by wildlife during summer because of inadequate water. Between April 8 and 20, 1977, staff systematically collected ecological data from 28 waterholes, laying the groundwork for future habitat management.

Habitat improvement also became an important management priority. Kafeel Shaikh investigated the spread of invasive *Lantana* species, while numerous research projects examined wildlife behaviour, herd structure, breeding biology, seasonal movements, waterhole use, population dynamics, feeding ecology, and the diets of large carnivores. BNHS researcher M.D. Wright prepared the first comprehensive checklist of Melghat's birds, documenting 230 species belonging to 38 families. Another landmark contribution was V.B. Sawarkar's 1979 study of livestock predation by tigers. Although ecological research flourished during this period, commercial timber extraction continued under the prevailing forest management system, except within the 301 sq. km Gugamal National Park, where forestry operations had already ceased.

The second decade of Project Tiger (1982–1992) marked a period of consolidation. Extending over more than 1,600 sq. km of tropical dry deciduous forest, Melghat became one of Asia's largest contiguous tracts of this forest type and an increasingly secure refuge for tigers. The formal notification of Gugamal National Park in 1987 further strengthened protection of the reserve's core.

Botanist Dr M.A. Dhore, of Vidarbha Mahavidyalaya, together with Research Officer P.A. Joshi, documented Melghat's rich flora, recording 648 plant species belonging to 97 families, including several rare ferns reported for the first time by Dr Dhore. Poaching remained minimal throughout this period. The second management plan (1988–1998) was prepared under the leadership of M.G. Gogte, and these first two decades collectively established the scientific, ecological, and administrative foundations upon which Melghat's future conservation success would be built.

By 1994, the reserve was estimated, using the pugmark method, to support 70–75 tigers, with a further 20 individuals occupying adjoining forests. Yet the third decade of Project Tiger brought Melghat into the national spotlight for an entirely different reason.

1994: Malnutrition Deaths and Denotification

Reports of malnutrition-related deaths among tribal children during 1992–93 were widely attributed to reduced employment following the decline of logging

Table 1: Cattle and human populations resettled from the Melghat Tiger Reserve, and the area restored for wildlife

Sr. No.	Village name (Year of Resettlement)	Area Vacated (Ha)	Families	Cattle Population	Human Population
1	Bori (2000)	36.91	20	273	135
2	Koha (2001)	59.09	39	348	223
3	Kund (2001)	31.57	34	141	141
4	Churni (2008–11)	63.96	67	831	201
5	Amona (2011)	82.35	90	65	292
6	Nagartas (2011)	74.62	70	77	273
7	Barukheda (2011)	61.55	265	76	1064
8	Dhargad (2012)	130.06	161	681	509
9	Vairat (2011–12)	70.3	80	314	256
10	Gullarghat (2012)	196	185	350	430
11	Somthana Bujruk (2012)	61.3	203	348	656
12	Somthana Khurd (2012)	151.77	269	687	767
13	Talai (2012–14)	106.25	178	474	802
14	Kelpani (2012–14)	196.76	385	683	434
15	Chunkhedi (2014–15)	50.53	236	492	774
16	Rohinkhidki (2014–15)	146	594	552	1368
17	Ambabarawa (2014–15)	74.75	305	443	1005
18	Dolar (2018–19)	93.76	154	236	328
19	Memna (2019–20)	141.86	99	150	263
20	Mangia (2019–20)	158.27	394	1002	926
21	Pastalai (2018–19)	137.76	157	145	387
22	Pili (2018–19)	186.96	263	755	650
	Total	**2,312.38**	**4248**	**9123**	**11884**

operations in the MTR and the poor road network within the region. In response, the Office of the Chief Wildlife Warden proposed the controversial denotification of 532 sq. km of Melghat Wildlife Sanctuary (WLS), encompassing 39 villages with a population of approximately 15,000. I could never understand the logic behind this proposal, as the villages themselves occupied only 57 sq. km, while the remaining area comprised rich forest and prime habitat for tigers, large herbivores, and several threatened bird species.

On December 24, 1993, the Maharashtra Legislative Assembly passed a resolution under Section 26A(3) of the Wild Life (Protection) Act, 1972, denotifying more than 532 sq. km of Melghat WLS. Ironically, the reported malnutrition deaths had occurred primarily outside the tiger reserve during the monsoon months. The denotification weakened management by restricting the Field Director's direct responsibility to the remaining 1,150 sq. km of Melghat WLS and Gugamal National Park, leaving the denotified 526 sq. km largely neglected.

The subsequent Nalinakshan and Sinha Committees confirmed that infant mortality was concentrated outside the tiger reserve, mainly in Dharni Tehsil, with very few cases in the non-forested parts of Chikhaldara Tehsil. They concluded that communities living inside the reserve were largely protected from malnutrition because they retained access to forest foods such as, crabs, tubers, edible creepers, *mahua* flowers, and other natural resources.

Harming Heaven with Roads

Because the entire region is popularly known as 'Melghat', the issue of malnutrition was linked to the tiger reserve and approval was secured for a ₹90-crore road development project in areas where malnutrition-related deaths had been negligible.

In the name of improving village connectivity, a ₹60-lakh bridge was constructed for Pili, a village of barely 30 households, situated less than 500 m from the Semadoh–Harisal Highway. A 26-km road was built to Kund, even though its residents had already expressed a preference for relocation. Hillocks in the Raipur Range were excavated for *murum*, rock was quarried, and trees were felled for fuelwood during construction. Meanwhile, the two highways already passing through Melghat continued to cause significant wildlife mortality, while proposals to restrict traffic to daylight hours were rejected.

Another proposal called for black-topped roads to 59 villages as a measure to "combat malnutrition". Nearly ₹30 crores were spent on infrastructure for approximately 40,000 people, despite the fact that these villages had never required emergency food relief or drinking water supplied by tankers. Road construction opened previously inaccessible forests to large numbers of labourers, increasing opportunities for poaching. Areas once reachable only by four-wheel-drive vehicles became accessible to ordinary cars, and roadkills became increasingly common. Ironically, the Korku people continued to prefer their traditional, shaded forest bullock-cart tracks, while the new roads primarily benefited traders seeking timber, minor forest produce, and medicinal plants.

Melghat Under Threat from Dams

Melghat also faced two major development projects that posed serious ecological threats. The proposed Chikhaldara Pumped Storage Project would have submerged more than 100 hectares of

Melghat is known for harbouring one of the largest populations of gaur in India

forest used by tigers and leopards near the Bhimkund Valley.

An even greater threat was the proposed Upper Tapi Stage II Project, centred on the Kharia–Gutighat Dam across the Tapi River. The proposed 67.5-metre-high, 10-km-long dam would have submerged 5,836 hectares of forest, although the true ecological impact would have extended far beyond the area directly inundated. The project required more than 17,000 hectares (170 sq. km) of land at an estimated cost of ₹907 crores. Approximately 244 hectares of the MTR would have been submerged. More importantly, as part of the critical wildlife corridor linking Melghat with the Satpura landscape, the reservoir, its backwaters, and associated canal network would have fragmented habitat and isolated wildlife populations. The project also threatened to displace 72 predominantly tribal villages, with a combined population exceeding 54,000 (1991 Census).

Ecological surveys recorded 14 rare plant species, together with several Schedule I species under the Wild Life (Protection) Act, 1972, including eight mammal species, six bird species, and two reptile species, within the proposed submergence zone. Together with fellow conservation volunteers, I resolved to oppose these projects using every means available.

The jackal is one of the many wild inhabitants of Melghat Tiger Rerserve

Poaching

The weakening of protection following the denotification emboldened organised poaching networks. In 1995, I witnessed traders from Pili and Keli transporting tiger skins to Indore. On April 21, 1998, a waterhole was poisoned, resulting in the deaths of two tigers, whose carcasses were later recovered near Dhargad (4 June) and Somthana (27 June). By mid-1998, I had been appointed Honorary Wildlife Warden, Amravati, and began pursuing poaching cases more aggressively. Working alongside dedicated forest officers, we dismantled several key links in the poaching network. In May 1999, eight notorious poachers were arrested in Akola with two tiger skins**,** two leopard skins**,** and tiger bones, marking a significant breakthrough in anti-poaching efforts.

The Guns of Pachauri

In June 2001, wildlife writer and former National Board for Wildlife member Prerna Singh Bindra exposed an illegal arms manufacturing network operating in the Ambabarawa Forest in *The Week*. Her investigation revealed that Pachauri, a remote village on the Maharashtra–Madhya Pradesh border, had become a major supply centre for country-made firearms used by poachers and dacoits across several states. Forest officials were well aware of the problem but lacked the firepower needed to confront these heavily armed groups, forcing many frontline staff to patrol cautiously and avoid direct confrontation.

Village Resettlement: A New Lease of Life

The successful relocation of Bori village in 2001 encouraged several other villages to volunteer for resettlement. As originally planned, Koha and Kund were relocated next, only 2 km from the new Bori settlement, and both relocations were completed by the end of 2003. Over the past 26 years, the MTR administration has relocated 22 villages, resettling 4,248 families (approximately 11,800 people)

and nearly 9,000 cattle outside the core area. These relocations have secured more than 2,312 hectares of inviolate habitat for wildlife. The relocation of Malur and Chopan villages is currently underway. The MTR administration has periodically evaluated these resettlements using both socio-economic and ecological indicators, and successive Field Directors have published detailed reports documenting their outcomes.

1998: The Rediscovery of the Forest Owlet

Our years of hard work were beginning to bear fruit. As M.K. Ranjitsinh, the distinguished retired IAS officer who played a pivotal role in launching Project Tiger in 1972–73, once observed:

"Tiger Reserves were not established only to protect tigers. The idea was to provide legal and physical protection to habitats that support the conservation of indigenous species."

Dr Ranjitsinh had recorded the rare Saker Falcon (*Falco cherrug*) near Kukru Rest House in Melghat on January 31, 1984. When he returned in 2022 to participate in the Satpuda Landscape Tiger Partnership (SLTP) seminar, he was delighted to learn that the Forest Owlet *Athene blewitti* was in Melghat rediscovered and the area now supported one of the known populations of this globally endangered species.

In 1998, our team from the Nature Conservation Society, Amravati (NCSA) – Nishikant Kale, Vishal Wankhede, Pratap Thakre, Dr Khode, and I – recorded the Forest Owlet in Melghat after its rediscovery. India supports around 60 species and subspecies of owls, and Melghat harbours several of them, including healthy populations of the Forest Owlet and the Oriental Scops Owl (*Otus sunia sunia*).

2007: Strengthening the Tiger Landscape – Wan, Ambabarawa, and Narnala

In 2007, while serving on the expert committees constituted to delineate the Critical Tiger Habitat (CTH) and buffer of the MTR, I advocated two important measures. First, I recommended that the denotified portion of the Melghat WLS should be designated as the reserve's buffer. Second, I proposed that Wan**,** Ambabarawa, and Narnala Wildlife Sanctuaries should be incorporated into the Critical Tiger Habitat.

These recommendations were accepted and resulted in a significant expansion of the Melghat Tiger Reserve's core area to include:

Table 2: Name of villages situated inside the PAs / Core/ CTH of MTR

Sr. No.	Name of WLS	Number of Villages	Name of Villages
1	Melghat	22	Bori, Koha, Kund, Churni, Vairat, Dhargad, Gullarghat, Kelpani, Pastalai, Dolar, Memna, Pili, Mangia, Malur, Chopan, Dhakna, Adhav, Rora, Semadoh, Raipur, Madizadap, Makhala
2	Wan	7	Nagartas, Somthana Khurd, Somthana Bujruk, Barukheda, Amona, Talai and Golai
3	Ambabarawa	3	Rohinkhidki, Chunkhedi, Ambabarawa

- ❑ Gugamal National Park (361.28 sq. km)
- ❑ Melghat Wildlife Sanctuary (788.75 sq. km)
- ❑ Wan Wildlife Sanctuary (211 sq. km)
- ❑ Narnala Wildlife Sanctuary (12.35 sq. km) and
- ❑ Ambabarawa Wildlife Sanctuary (127.11 sq. km),

2014: Conserving the Mahseer in the Tapi

The iconic Mahseer of the Tapi River had declined severely following the construction of a series of dams. Historical records indicate that the stretches around Semadoh, Rakhidoh,

The Endangered Forest Owlet was rediscovered from Melghat in 1997

Together, these protected areas create a larger, more resilient, and better-connected tiger landscape

WAN WILDLIFE SANCTUARY

Established: July 29, 1997
Area: 211 sq. km
Access: Via Akot (45 km from Akola railway station on the Mumbai–Howrah railway line).
Accommodation: Basic Forest Department Guest House and tents, Wan.

NARNALA WILDLIFE SANCTUARY

Established: 1997
Area: 12.35 km^2
Access: Entry via Shahanoor, approximately 15 km from Akot.
Accommodation: Forest Department Guest House, tourst complex, Shahanoor, Akot.

AMBABARAWA WILDLIFE SANCTUARY

Established: 1997
Area: 127.11 km^2
Access: Via Wasadi Gate in Buldhana district, about 70 km from Akola railway station.
Accommodation: Beautiful tourist complex at Wasadi Gate

Harisal, and Belkund Rest House once supported thriving populations of this remarkable .

Based on a conservation proposal that I submitted, the Maharashtra State Biodiversity Board initiated efforts to restore the nearly extinct mahseer population within the Tapi River in Melghat. This was followed by an *ex situ* conservation and captive-breeding programme at Hirabambai Lake under the guidance of the renowned mahseer expert Shashank Ogale from Talegaon Dabhade in Pune.

Biodiversity discoveries continued to highlight Melghat's ecological significance. In March 2020, researchers from the Wildlife Institute of India, working on the project *Long-term Monitoring of Tigers in Vidarbha*, obtained a rare camera-trap photograph of a brown Sloth Bear (*Melursus ursinus*), adding to earlier records from the landscape. Around the same period, Dr Ganesh N. Vankhede documented an impressive diversity of 1,569 spider species from Melghat, further demonstrating the region's extraordinary biological richness.

Perched high above the canopy, the Changeable Hawk-Eagle surveys the forest with unwavering patience and remarkable precision

A Living Legacy

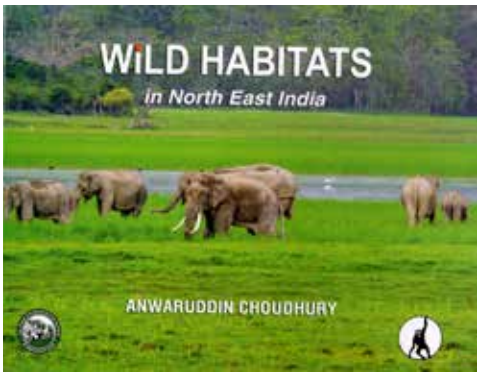
The many individuals mentioned in this article have each contributed to shaping the Melghat we know today, and I salute every one of them. Today, Melghat stands as one of India's most significant conservation success stories. Two major dam projects have been halted, night-time traffic on the two highways passing through the reserve has been restricted, and the proposed broad-gauge railway through the Critical Tiger Habitat has been realigned outside the reserve.

The voluntary relocation of 22 villages has restored nearly 2,500 hectares of productive grassland and forest habitat, where sightings of tigresses raising litters of three cubs have become increasingly common.

The Forest Owlet, mahseer, geckos, spiders, and newly discovered plant species continue to attract researchers from across India. Although new conservation challenges will inevitably emerge, my faith remains firmly rooted in the people who have dedicated themselves to protecting Melghat. Their commitment has only strengthened over the past five decades, offering hope that this remarkable landscape will continue to thrive for generations to come.

Kishor Rithe, Director, BNHS, has been working for wildlife conservation through sustainable livelihoods, conservation action, advocacy, and policy for over three decades.

It is widely recognised that North-East India, embracing the enchanting Seven Sister States, remains one of the last great repositories of natural splendour in India. Vast emerald forests still cloak its hills and valleys; shimmering wetlands mirror the changing skies; sweeping grasslands ripple beneath the wind; and countless rivers, streams, tumbling waterfalls, and sandy or pebble-strewn banks weave a living tapestry across the landscape. Within these diverse habitats thrives an astonishing wealth of life – colourful birds, majestic mammals, exquisite flowers, impressive trees, gracefully coiled lianas and climbers, myriad insects, frogs singing unseen in marshes, lizards basking on sunlit rocks, serpents concealed beneath the leaf litter, and innumerable other creatures that guard Nature's deepest secrets.



Wild Habitats in North East India
By: Anwaruddin Choudhury
Published by: Gibbon Books and the Rhino Foundation for Nature in NE India, 2026
Size: 18.5 x 25 cm
Pages: 160
Price: ₹ 1,950/-
Hardback
Reviewed by: **Asad R. Rahmani**

Many authors have attempted to capture the natural wonders of North-East India within the covers of a single volume. Yet I can confidently say that few books come as close to achieving this ambitious goal as Anwaruddin's remarkable work. Spanning 160 pages and enriched by 250 photographs, all taken by the author within the region itself, the book serves both as a visual feast and as a heartfelt tribute to one of India's most biodiverse landscapes.

Anwaruddin, known affectionately to friends and readers simply as Anwar, is a prolific writer and chronicler of the natural world. His literary and scientific output is truly impressive: more than 990 scholarly and popular articles, 30 books and monographs, and over 55 technical reports devoted to wildlife and conservation. His academic credentials are equally distinguished. Holding an MA in Geography, a PhD on primates, and a DSc on the mammals of North-East India, he combines rigorous scholarship with five decades of field experience.

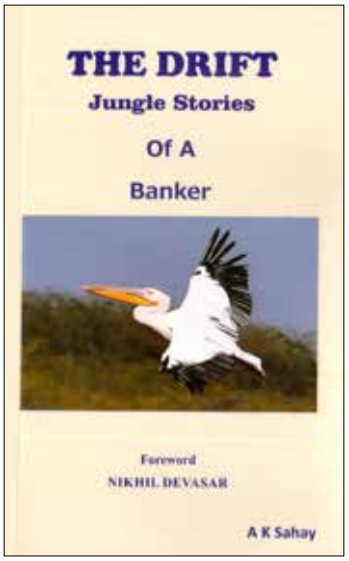
Before dedicating himself entirely to natural history, Anwar served with distinction in the civil service, retiring as Divisional Commissioner of the Barak Valley and as Commissioner and Secretary to the Government of Assam. Given such a rich and varied career, it is hardly surprising that he writes with authority, clarity, and deep affection for the landscapes he knows and loves.

Now, at the age of sixty-seven and free from the demands of government service, Anwar devotes his days to reading, writing, and field exploration. One can almost picture him walking along mist-laden forest trails at dawn, notebook in hand, listening to the chorus of birds rising from the canopy while shafts of golden light filter through the trees. This volume stands as a fitting reflection of a life devoted to knowledge and conservation – a journey extending across nearly half a century.

What impressed me most, however, beyond the engaging text and the abundance of beautiful photographs, was the Preface. In gracious and heartfelt prose, Anwar acknowledges the many individuals who shaped his life and career – from his grandparents and parents, whose early influence nurtured his curiosity, to the young field assistants who accompanied him through forests, wetlands, and remote landscapes. The Preface reads almost like a miniature autobiography: concise yet deeply personal, revealing the human story behind the scientist and conservationist. It is a touching reminder that every lifelong journey in natural history is illuminated by the guidance, encouragement, and companionship of others. It is also a tribute to the natural world, the pursuit of which enriches our lives and makes us better human beings.

The maps are superb. As a skilled cartographer himself, one expects nothing less from Anwar. The text is rich in detail on the physiogeography, geology, and biogeography of the region. Informative captions accompanying the illustrations complement the lucid text, making the book a pleasure to read at leisure. Indeed, reading the captions alone provides a wealth of knowledge about the region and its wildlife for example, that the lesser-known Barak-Bhuban Wildlife Sanctuary in Cachar District supports eight species of primates, or that Loktak Lake in Manipur, covering an area of 287 sq. km, is the largest freshwater lake in North-East India.

If you enjoy reading books that combine knowledge, beautiful illustrations, and a sense of nostalgia, this volume will fulfil all these expectations, and much more. Despite its relatively steep price, it is well worth buying.



The Drift – Jungle Stories of a Banker
By: A.K. Sahay
Published by: WishTree Publishing, 2026
Size: 18 x 11 cm
Pages: 154
Price: ₹ 529/-
Paperback
Reviewed by:
Romulus Whitaker

I was delighted to receive a copy of Akhilesh Sahay's stories, especially as he has long been a member of the Bombay Natural History Society, an organisation that encouraged me in my early days and put me in touch with the luminaries of the natural history world here in India. It was also particularly meaningful that he has dedicated this book to three remarkable individuals – Sálim Ali, J.C. Daniel, and Asad Rahmani – all of whom profoundly influenced his career as a naturalist.

Most of this book comprises not tales from the wild jungle, but the story of how the author developed his lifelong interest in wildlife while pursuing the demanding day-to-day profession of banking. It is clear that he longed to escape the routine of that mundane work. In the first half of the book, he describes how he cultivated his passion for photography and was fortunate enough to meet and be mentored by the great wildlife photographer E. Hanumantha Rao. Yet it all began during his school days, when he struggled to pass his examinations, with mathematics proving to be his greatest stumbling block. I immediately empathised with him, as mathematics was also a subject I simply could not master at school. His mother, however, promised to buy him a camera if he passed his examinations – a reward that provided exactly the motivation he needed.

Sahay recounts the hardships his family endured after his father died suddenly of a heart attack. In 1982, he secured a position with the State Bank of Mysore, and his first posting was at an outpost in the Male Mahadeshwar (MM) Hills. Surrounded by forests, he and his colleagues formed a group called *Jungle Lovers* and spent their time trekking through the wilderness in search of elephants. He was later transferred to Shimoga, adjacent to several outstanding wildlife areas, including the Bhadra Tiger Reserve and the Shettihalli Wildlife Sanctuary. Meeting the Divisional Forest Officer proved to be a turning point, as it gave Sahay greater opportunities to spend time in these protected areas observing wildlife.

Sahay began writing wildlife articles for *The Statesman*, the Kolkata newspaper that had once been the domain of the late, great M. Krishnan. Another defining moment in Sahay's life came when he met the President of India, A.P.J. Abdul Kalam, who had read and appreciated Sahay's book GLIMPSES FROM INDIA'S NATURAL WORLD. The book carries a foreword by the renowned wildlife biologist George Schaller and was edited by J.C. Daniel. Inspired by President Kalam's advice, Sahay devoted himself to nature education campaigns in schools and colleges.

I greatly admire the way Sahay pursued his passion despite the setbacks he faced in his early life and the constraints of his career in banking. He overcame these challenges through perseverance and an unwavering determination to capture that perfect photograph – whether of a pelican in flight or of the arrival of migratory Ruddy Shelducks at just the right place and time. There is also a touching chapter describing how he met his delightful future wife, Sangita, and how she soon became an enthusiastic companion in his adventurous life.

The final chapters of this engaging book recount the author's experiences in his quest to capture the perfect image of birds such as the jacana, painted stork, and kingfisher. Sahay genuinely believes that he communes with the birds he pursues; and who knows, perhaps he really can send them subliminal messages, persuading them to remain still just long enough for him to approach close enough to capture that ultimate photograph.

Handbook of the Birds of India (and South Asia)

– BNHS Revision Project

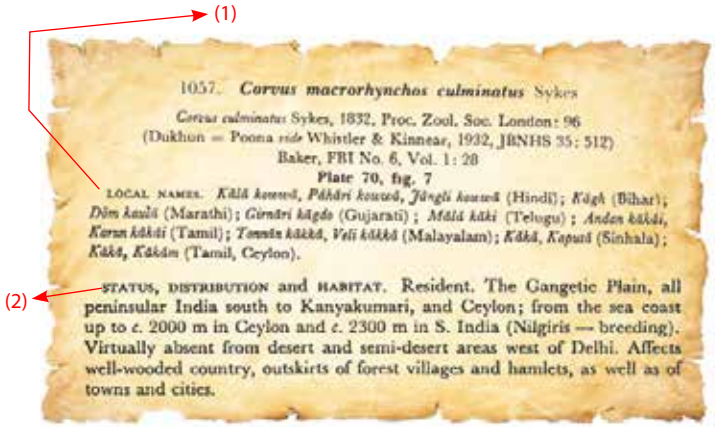
The *Handbook of the Birds of India and Pakistan* is proposed for revision by the Bombay Natural History Society (BNHS) as *The Handbook of the Birds of India (and South Asia)*. The original ten volume '*Handbook*' by Drs Sálim Ali and Sydney Dillon Ripley is 'The Classic Reference' to the birds of the Subcontinent and currently out of print. It is now proposed to establish a larger internet-presence with e-repositories, maps, the Handbook pages with new information. Submissions will only be accepted from members and associate members of the BNHS, and will be acknowledged with credit to the authors, on each occasion and for each species.

For several decades, the 10-volume *Handbook of the Birds of India and Pakistan* by Dr Sálim Ali and Dr S. Dillon Ripley has been the definitive authority on our region's avifauna. Now, the BNHS is launching a monumental project, revising and expanding this classic into the *Handbook of the Birds of India (and South Asia)* – in both print and continuous digital e-pages!

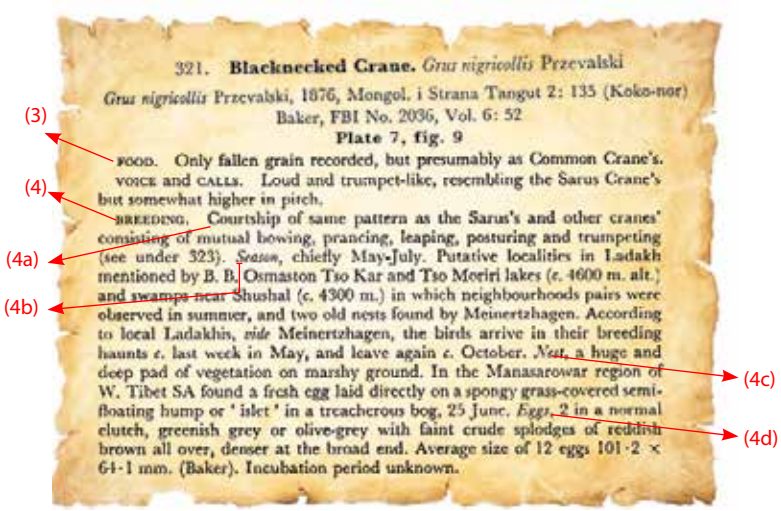
We are inviting BNHS members, associate members, birdwatchers, and field ornithologists across South Asia to help us build this living archive.

Contributions or submissions are welcome through email (handbook@bnhs.org), Facebook, at https://www.facebook.com/share/g/1XwZmXbocB. Instagram, BNHS WhatsApp groups, and at the online portal will also be made available.

Sample sections from the Handbook are featured alongside To guide prospective


(1)
1057. Corvus macrorhynchos culminatus Sykes
Corvus culminatus Sykes, 1832, Proc. Zool. Soc. London: 96
(Dukhun = Poona vide Whistler & Kinnear, 1932, JBNHS 35: 512)
Baker, FBI No. 6, Vol. 1: 28
Plate 70, fig. 7
LOCAL NAMES. Kālā kauvā, Pāhāri kauvā, Jāngli kauvā (Hindi); Kāgh (Bihar);
Dīm kauli (Marathi); Gārdri kāgdo (Gujarati); Mālā kāki (Telugu); Andan kākki,
Karun kākki (Tamil); Tennin kākkā, Vali kākkā (Malayalam); Kākā, Kapuā (Sinhala);
Kāka, Kākām (Tamil, Ceylon).
(2)
STATUS, DISTRIBUTION and HABITAT. Resident. The Gangetic Plain, all peninsular India south to Kanyakumari, and Ceylon; from the sea coast up to c. 2000 m in Ceylon and c. 2300 m in S. India (Nilgiris — breeding). Virtually absent from desert and semi-desert areas west of Delhi. Affects well-wooded country, outskirts of forest villages and hamlets, as well as of towns and cities.

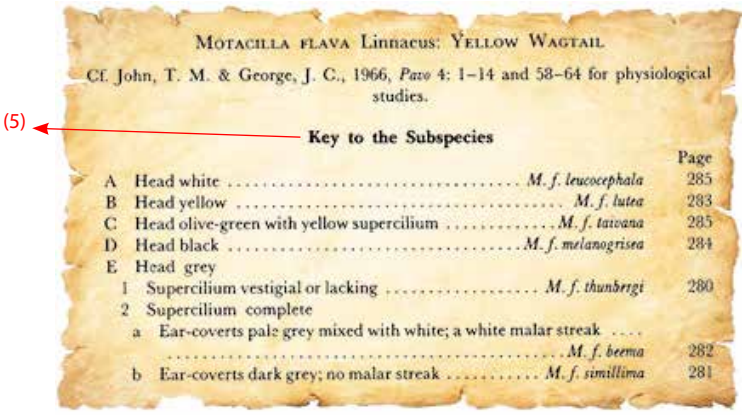
Key for submissions: (1) Local Names - may be submitted with notes about locality, language, and/or local dialect, and source of information, i.e., local community use etc; (2) Status, Distribution and Habitat - may submit if new information is validated by photos, repeat sightings, capture record during permitted bird ringing studies, and through seasonal bird census records


321. Blacknecked Crane. Grus nigricollis Przevalski
Grus nigricollis Przevalski, 1876, Mongol. i Strana Tangut 2: 135 (Koko-nor)
Baker, FBI No. 2036, Vol. 6: 52
Plate 7, fig. 9
(3)
FOOD. Only fallen grain recorded, but presumably as Common Crane's.
VOICE and CALLS. Loud and trumpet-like, resembling the Sarus Crane's but somewhat higher in pitch.
(4)
BREEDING. Courtship of same pattern as the Sarus's and other cranes' consisting of mutual bowing, prancing, leaping, posturing and trumpeting (see under 323). Season, chiefly May-July. Putative localities in Ladakh mentioned by B. B. Osmaston Tso Kar and Tso Moriri lakes (c. 4600 m. alt.) and swamps near Shushal (c. 4300 m.) in which neighbourhoods pairs were observed in summer, and two old nests found by Meinertzhagen. According to local Ladakhis, vide Meinertzhagen, the birds arrive in their breeding haunts c. last week in May, and leave again c. October. Nest, a huge and deep pad of vegetation on marshy ground. In the Manasarowar region of W. Tibet SA found a fresh egg laid directly on a spongy grass-covered semi-floating hump or 'islet' in a treacherous bog, 25 June. Eggs, 2 in a normal clutch, greenish grey or olive-grey with faint crude splodges of reddish brown all over, denser at the broad end. Average size of 12 eggs 101·2 × 64·1 mm. (Baker). Incubation period unknown.
(4a)
(4b)
(4c)
(4d)

Key for submissions: (3) Food - may submit records of new types of food being eaten or hunted by species, including photo documentation, seasonal variations or location specific choices. (4) Breeding - (4a) Courtship - variations in display behaviour, or detailed notes if earlier description is brief, photo records with statement that observations were made at a distance and the breeding pair was not disturbed, (4b) Season - variations and/ or extensions of breeding season, local or extralimital changes, (4c) Nest - choices of nesting locations and nest material, incubation period, nidification, (4d) Eggs - description and number of eggs, with statement that nesting or nest building was not disturbed

EXAMPLE

Photo submission by Pravinsingh Pardeshi (President BNHS) -Record of fish being consumed by Black-necked Crane at a wetland near Khaldo hamlet, Hanle, Ladakh (July 22, 2026). Note - The Handbook does not document fish being caught and eaten by the species though cranes are known to do so. [This is a typical submission, with photo record and an addition to information in print within the Handbook]

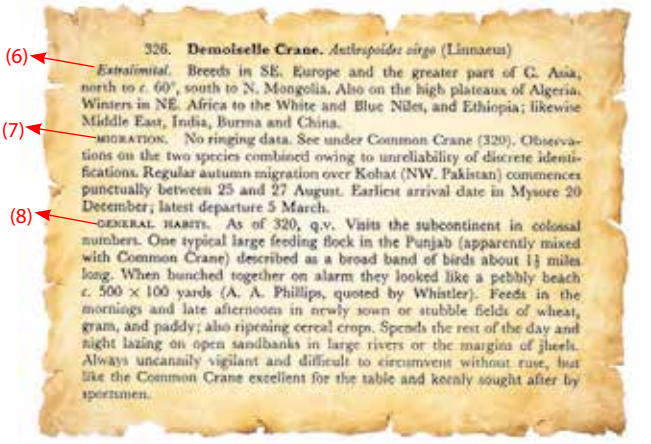


MOTACILLA FLAVA Linnaeus: YELLOW WAGTAIL

Cf. John, T. M. & George, J. C., 1966, *Pavo* 4: 1–14 and 58–64 for physiological studies.

(5) **Key to the Subspecies**

		Page
A	Head white ..... *M. f. leucocephala*	285
B	Head yellow ..... *M. f. lutea*	283
C	Head olive-green with yellow supercilium ..... *M. f. taivana*	285
D	Head black ..... *M. f. melanogrisea*	284
E	Head grey	
1	Supercilium vestigial or lacking ..... *M. f. thunbergi*	280
2	Supercilium complete	
a	Ear-coverts pale grey mixed with white; a white malar streak ..... *M. f. beema*	282
b	Ear-coverts dark grey; no malar streak ..... *M. f. simillima*	281



326. **Demoiselle Crane.** *Anthropoides virgo* (Linnaeus)

(6) *Extralimital.* Breeds in SE. Europe and the greater part of C. Asia, north to *c.* 60°, south to N. Mongolia. Also on the high plateaux of Algeria. Winters in NE. Africa to the White and Blue Niles, and Ethiopia; likewise Middle East, India, Burma and China.

(7) MIGRATION. No ringing data. See under Common Crane (320). Observations on the two species combined owing to unreliability of discrete identifications. Regular autumn migration over Kohat (NW. Pakistan) commences punctually between 25 and 27 August. Earliest arrival date in Mysore 20 December; latest departure 5 March.

(8) GENERAL HABITS. As of 320, q.v. Visits the subcontinent in colossal numbers. One typical large feeding flock in the Punjab (apparently mixed with Common Crane) described as a broad band of birds about 1½ miles long. When bunched together on alarm they looked like a pebbly beach *c.* 500 × 100 yards (A. A. Phillips, quoted by Whistler). Feeds in the mornings and late afternoons in newly sown or stubble fields of wheat, gram, and paddy; also ripening cereal crops. Spends the rest of the day and night lazing on open sandbanks in large rivers or the margins of jheels. Always uncannily vigilant and difficult to circumvent without ruse, but like the Common Crane excellent for the table and keenly sought after by sportsmen.

Note about sightings of subspecies - Usually it is very difficult to distinguish between the subspecies in the field unless the plumage and size or external characters are distinctly different. For example, in the yellow wagtails. Submissions of field records for new information, if limited to certain subspecies, may be validated with notes regarding certainty of field sightings, external descriptions and photographs. If study was approved for bird ringing or migration studies – notes with variations in wing size, body weight, bill and plumage may be submitted along with information about permission for handling the birds. While notes may be submitted, subspecies sightings will not be accepted if field observations do not permit or validate the identification.

Key for submissions: (6) Extralimital - Information of changes in extralimital distribution with published and verifiable records, or field records of new extensions in local migration or altitudinal movement across seasons; (7) Migration - Field sightings of birds with distinct rings and colour bands; arrival or movement records of waterbirds and other species, such as wheatears, finches and cuckoos or falcons; (8) General Habits - field observations about behaviour, choice of roost or resting locations, association with other species, and foraging in mixed-species flocks, among other such notes may be submitted. **Important**: All information should be accompanied with details about dates, location and habitat type.

contributors. The sections highlight key parameters – such as Local names, habitat, distribution, food, migration, general habits, and local distribution – for which BNHS members and associate members can submit updates, new observations, field notes, audio-visual media, and high-resolution photographs.

Submissions will undergo peer review by an Editorial Board of expert ornithologists to ensure scientific accuracy before being incorporated into the continuously updated digital e-pages and future print volumes. Members are also encouraged to propose new species or taxonomic updates, particularly concerning endemic, threatened, or regionally declining taxa. Where a full-colour plate is not warranted, approved species will be featured through dedicated digital profiles and photographs.

All accepted contributions will be formally credited in both the digital e-pages and the revised 10-volume print set. We invite birdwatchers across South Asia to join or renew their BNHS membership and participate directly in updating this monumental regional archive. ■

– Bharat Bhushan
Honorary Secretary, BNHS

How to Contribute to the Revised Handbook

1. Identify Opportunities

Review the sample Handbook entries provided here from vocalizations and migration routes to local status and nesting behaviour. These sections is open to revision and enrichment.

2. Prepare Your Submission

BNHS members and associate members across South Asia can contribute:

- Field Notes & Updates: Direct observations on distribution, ecology, behaviour, and other aspects of species biology.
- Media & Tracking Data: High-resolution photographs, sound recordings, video clips, and migration-tracking data.

Sir George Ambrose Lloyd, 1st Baron Lloyd

8th President of BNHS (1918–1923)

Sir George Ambrose Lloyd, 1st Baron Lloyd (1879–1941), served as the eighth President of the Bombay Natural History Society from 1918–1923 while also serving as the Governor of the Bombay Presidency in British India. An alumnus of Eton College and Trinity College, Cambridge, he was a member of the Cambridge team for the 1899 and 1900 Boat Races. However, he did not complete his studies, having been deeply affected by the deaths of both his parents in 1899. He subsequently travelled extensively in India before returning to England. In 1901, he joined the family firm, Stewarts and Lloyds, as its youngest director, and returned to India in 1905.

Elected to the British Parliament in 1910, Lloyd was a member of the Conservative leadership that declared war on Germany in August 1914. Commissioned into the British Army during the First World War, he served at Gallipoli and in several other theatres before joining T.E. Lawrence (of *Lawrence of Arabia* fame) in Cairo. During the later years of the war, Lloyd was appointed a Companion of the Order of the Indian Empire (CIE) in 1917. The following year, he was appointed Governor of Bombay and was further honoured as a Knight Commander of the Order of the Indian Empire (KCIE).

As Governor of Bombay, one of his key projects included reclamation of land in the Back Bay area of the city for housing, financed through loans raised in India rather than in England. Later, infamously, in dealing with the national unrest, he became controversial for insisting on the arrest of Mahatma Gandhi in 1921. During his tenure, Lloyd was also closely associated with the Bhandarkar Oriental Research Institute in Pune and facilitated a grant to support the publication of the *Mahabharata*.

In May 1940, Winston Churchill, as Prime Minister, appointed Lloyd as Secretary of State for the Colonies. Later that year, Churchill also appointed him Leader of the House of Lords.

Sir Leslie Orme Wilson, GCSI, GCMG, GCIE, DSO, PC

9th President of BNHS (1923–1926)

Sir Leslie Orme Wilson, GCSI, GCMG, GCIE, DSO, PC (1876–1955), was the 9th President of the Bombay Natural History Society and the Governor of Bombay State, British India, from 1923–1926. He later served as the Governor of Queensland, Australia, from 1928–1946. Following his retirement, while visiting Queensland in 1955, he was struck by a truck while walking and died at the age of 79.

Wilson was an officer in the Royal Marine Light Infantry and served in the Second Boer War. He subsequently served in New South Wales from 1903–1909. He was elected to the British Parliament, where he served from 1913–1922, during which time he was appointed Parliamentary Secretary in the Ministry of Shipping and later in the Treasury. He resigned his parliamentary seat in July 1923 upon his appointment as Governor of Bombay. Wilson also served as the District Grand Master for Bombay, and an active Masonic lodge in Pune continues to bear his name. In addition, the highest point in Mahabaleshwar, Satara District, standing at 1,439 m, is named Wilson Point in his honour.

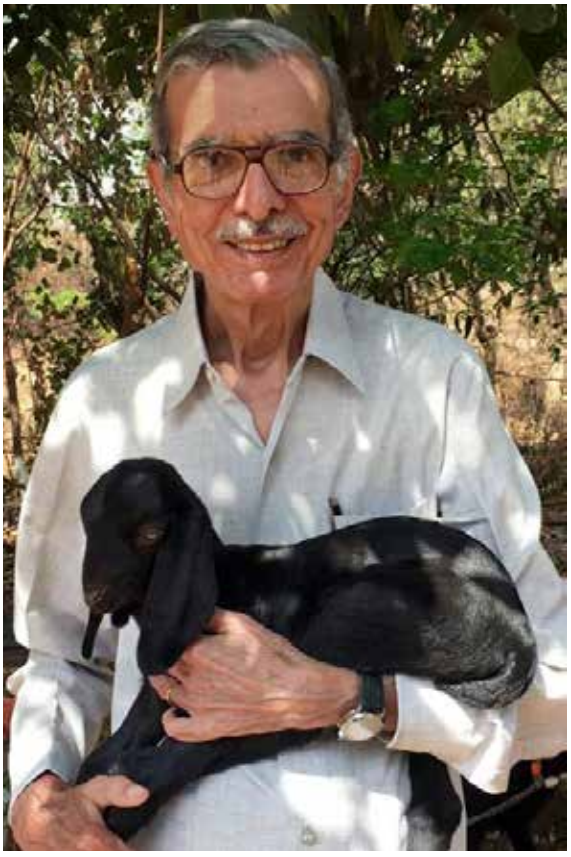
Abridged from various public sources.

Bharat Bhushan
Honorary Secretary, BNHS

Great Hornbill
[Painting by: J.P. Irani]

Remembering Jamshed Irani

I first heard of Mr Jamshed Irani from Dr Sálim Ali, who spoke with great admiration of his superb bird illustrations. Knowing what a perfectionist Dr Sálim Ali was, this was praise of the highest order indeed. Jamshed was then working at Larsen & Toubro (L&T). Mr Holck Larsen was a Trustee of the World Wide Fund for Nature-India (WWF-India), and I was its Administrator and CEO. During a meeting with him in his office one day, I mentioned that Dr Sálim Ali had warmly praised a Mr Jamshed Irani who worked with L&T. Mr Holck Larsen immediately replied, "You haven't met him? You must meet him!"



J.P. Irani
September 6, 1938 – April 20, 2026

Rather than sending for Mr Jamshed Irani, Mr Holck Larsen personally led me through a series of back passages and stairways to where Jamshed was working quietly at a drawing board. That simple gesture spoke volumes. It demonstrated the high regard in which these distinguished men held Jamshed Irani, and, over the years, I had many opportunities to add my own admiration to theirs.

Jamshed was not only a great artist, but also a wonderful human being. He responded to every request with remarkable talent and unfailing generosity. He contributed many of his paintings for reproduction on WWF and BNHS greeting cards and never sought any remuneration in return. His extraordinary skill with watercolours and oils, combining artistic sensitivity with scientific accuracy, was repeatedly placed at the service of the Bombay Natural History Society.

He had the distinction of being the only Indian artist to illustrate plates in each of the ten volumes of the HANDBOOK OF THE BIRDS OF INDIA AND PAKISTAN. This was, in fact, one of his earliest associations with Dr Sálim Ali, beginning in 1963 when the great birdman of India was searching for an artist for this monumental ten-volume work. Thereafter, Jamshed illustrated many of the plates in THE BOOK OF INDIAN BIRDS and BIRDS OF THE EASTERN HIMALAYAS by Dr Sálim Ali. He also provided illustrations for COMMON BIRDS by Sálim Ali and Laeeq Futehally, OUR FEATHERED FRIENDS by U. Chopra, and WATCHING BIRDS by Jamal Ara.

His talent, and the recognition it received, extended far beyond the painting of birds. On November 12, 2003, he was awarded a Gold Medal and Citation by the Sálim Ali Loke Wan Tho Ornithological Research Fund of the BNHS in recognition of his contributions to Indian ornithology. Thanks to the efforts of Dr Sálim Ali and Mr Dhirubhai Mehta, the renowned philatelist, Jamshed was commissioned by the Department of Posts to design 34 postage stamps. These celebrated not only birds, but also flowers, Indian women pilots, the Konkan Railway, the International Leprosy Congress, the Scindia School Centenary, and A.D. Shroff. He approached each of these diverse subjects with the same meticulous excellence.

For all of us associated with the BNHS, however, his philatelic work is best remembered for the BNHS Centenary stamp issued on September 15, 1983, and later the commemorative stamp honouring Dr Sálim Ali.

His cherished legacy to the BNHS includes several magnificent paintings that he generously donated: the Great Indian Hornbill (now Great Hornbill), presented on the occasion of the Society's 125th anniversary, and portraits of Dr Sálim Ali, Mr Humayun Abdulali, and Mr J.C. Daniel. Through these portraits, he immortalised three of the remarkable personalities, who guided the BNHS during the many decades of his own association with the Society.

His painting of a tiger was the only work by a living artist to be featured in the BNHS coffee-table book LIVING JEWELS FROM THE INDIAN JUNGLES. Equally memorable was his painstaking oil reproduction of an old lithograph depicting the Western Ghats, which was auctioned in aid of the BNHS and purchased by the Godrej Group – yet another generous contribution to the Society. He also had the distinction of being commissioned by His Highness Jigme Dorji Wangchuck, the late King of Bhutan, to paint four birds in oils.

Slim almost to the point of appearing emaciated, humble and self-effacing, gentle yet immensely generous, Jamshed Irani was a dynamo of creativity. His versatility was truly astonishing. In 1971, he invented and patented the "Elliptomatic", a device for drawing perfect ellipses. When a freak accident in the 1980s severely damaged his right hand, leaving him unable to paint the intricate details for which his work was renowned, he painstakingly trained himself to achieve the same precision and finesse with his left hand. In time, his later works became virtually indistinguishable from those he had produced before the accident.

Equally remarkable were the exquisite silk embroideries, carved eggshells, and intricate wooden carvings of his later years, many of them created while he had taken up farming in Karjat.

His wife, Hutoxi, his children, Navrooz and Shahrukh, and his entire family loved, admired, and supported him throughout his life, until he passed away peacefully on April 20, 2026, after spending a week in the intensive care unit. His funeral was attended by loving relatives, close friends, and many of his neighbours from Rustom Baug.

For the BNHS, he lives on through the beautiful paintings he donated of Dr Sálim Ali, Humayun Abdulali, J.C. Daniel, and the Great Indian Hornbill; through the many illustrations that enrich BNHS publications; and through the affectionate memories of all those who had the privilege of knowing him.

On a personal note, I was delighted to learn that Jamshed, together with his brother Rustom and sister Dolly Irani, was among the earliest students to graduate from Devlali High School – a school established by my parents after they took over the Zoroastrian Boarding High School when it faced closure in 1949.

An Orchid painted by Jamshed Irani [Image Courtesy: Irani Family]

Perhaps it was Jamshed's early exposure to the beauty of nature in the one-acre garden of his home in Devlali that first touched his sensitive soul and inspired him to capture the splendour of the natural world after obtaining his Diploma in Commercial Art from Sir J.J. School of Art, Bombay. His parents nurtured their young son's love of gardening, drawing, and painting, passions that later blossomed under the mentorship of Dr Sálim Ali and were shaped by their shared commitment to excellence.

We have lost a great bird artist and an outstanding member of the BNHS, but his legacy endures – in the Society's collections, in its publications, and in the countless lives enriched by his art.

– Dilnavaz Variava
Former Vice President, BNHS

Birds, birdwatching and bird books: At the beginning with Sálim Ali and J.P. Irani

The monsoons in Mumbai do not merely bring rain, they bring an explosion of life that is intoxicating to a young, curious mind. Decades ago, as a young boy wanting to explore birds and start birdwatching, the city was a canvas of deep greens, muddy salt pans, and an astonishing array of wings. In those early, formative days, my entry into the mesmerising world of birds was not forged through expensive optics or formal academic training. It was built on obsession, walks through the forests of Borivali and the marshes of Antop Hill, and a relentless search for a way to name the creatures that flitted just beyond my reach.

To be a young birdwatcher in Bombay in those days was an exercise in passionate frugality. Binoculars were a luxury far beyond my means, and books – the true keys to the kingdom – were treasured possessions that demanded months of saving, sacrifice, and long hours spent peering into the display windows of second-hand bookshops in Fort or the footpath stalls at king's circle. When I finally managed to acquire my first battered copy of Dr Sálim Ali's THE BOOK OF INDIAN BIRDS, it felt more like an initiation than a purchase.

Yet, while the towering authority of Dr Sálim Ali's prose provided the intellectual framework of Indian ornithology, it was another hand that truly brought that world into focus for me. It was the exquisite, precise, and deeply soulful line work and colour plates of Mr J.P. Irani and many others.

For a novice in the field, a written description of a bird's plumage can be an abstract puzzle. The illustrations in 'The Book of Indian Birds', however, was a cascade. The artwork did not merely depict a specimen, it captured the *jiz* – the essential character, posture, and overall impression – of the living bird. Through the plates, the subtle distinctions between a Common Babbler and a Jungle Babbler became immediately apparent. It is no exaggeration to say that while Dr Sálim Ali taught us *how* to understand birds, it was J.P. Irani and the other bird artists who taught us how to identify the birds from the book after seeing them in the field.

The Pavement Libraries and the First Field Days

My early excursions were shaped by the geography of Mumbai (then Bombay) and its immediate hinterland. Long before the city's relentless expansion swallowed many of its seasonal wetlands, places such as Antop Hill, Vashi Creek, and the forested tracts of Sanjay Gandhi National Park – then known as Borivali National Park – were havens for birding.

I remember Saturdays and Sundays that began well before dawn. Armed with the train fare, a notebook, and a couple of homemade chapattis wrapped in newspaper, I would board a suburban local with friends. The destination was often the marshes or the mudflats along Thane and Vashi Creek. In those days, the air was heavy with the scent of salt and peat, while the waterbody shimmered with migratory waders.

Standing away from the slush, trying to distinguish a Common Sandpiper from a Spotted Sandpiper without the benefit of a spotting scope, was no easy task. I would sit on a dry patch of bund, open THE BOOK OF INDIAN BIRDS, and turn instinctively to the colour plates by J.P. Irani and others. His illustrations in the early editions of Dr Sálim Ali's books, together with his beautiful artwork for Jamal Ara's introductory texts, became my constant companions.

Irani possessed an uncanny ability to translate the three-dimensional, restless reality of a living bird onto a flat sheet of paper. His rendering in various plates of Jamal Ara's book, of the iridescent blues of the rollers or the intricate, cryptic plumage of other birds was so faithful that it almost rendered expensive photography unnecessary. In the scorching midday heat of the salt pans, when the shimmering air distorted everything in sight, the plates in THE BOOK OF INDIAN BIRDS became the ultimate reality check. The bird plates in the books of those years gave a young observer the confidence to say, *"Yes, that is a Little egret, not a median."*

The Handbook: A Student's Holy Grail

As the years passed, casual birdwatching gradually matured into a desire for serious, systematic field

study. I was no longer content merely to identify birds; I hoped to study their distribution, breeding variations, and complex moult cycles. This transition from enthusiastic amateur to serious student of ornithology demanded a significant leap in literature with the monumental ten-volume HANDBOOK OF THE BIRDS OF INDIA AND PAKISTAN, authored by Drs Sálim Ali and S. Dillon Ripley.

For a young researcher, the HANDBOOK was the Holy Grail. It was also prohibitively expensive. I vividly remember visiting the library at Hornbill House – the home of the Bombay Natural History Society (BNHS) – and gazing at those volumes with a mixture of reverence and longing. To own them seemed an impossible dream. I spent my time copying notes by hand, sketching the bird plates from the library copies, and maintaining field journals of my own observations from Lonavala and Talegaon and the coastal wetlands of Vashi and Elephanta Island.

Eventually, through unexpected windfalls, academic assignments, and careful budgeting, the volumes began to accumulate on my bookshelf, one by one. Opening a newly acquired volume of the HANDBOOK was always an unforgettable experience. Although the text was an encyclopaedic masterpiece of scientific information, it was invariably the colour plates that first captured my attention and anchored the knowledge in my mind.

J.P. Irani's contribution to the early volumes, alongside that of other distinguished artists, formed the visual backbone of modern Indian field ornithology. The illustrations were functional art at its finest. The different artists for the Handbook understood that a field plate was not merely an attractive picture, it was a diagnostic tool. The angle of a bill, the graduation of tail feathers, the subtle wash of yellow along a warbler's plumage – every detail was rendered with the precision of a scientist and the sensitivity of an artist.

From Field Guides to the Nation's Post: The Artistry of J.P. Irani

As my fieldwork took me farther into the remote corners of the country – from the dense canopy of Borivili to the arid scrublands of Bundelkhand, my appreciation of Irani's work deepened. I began to recognise his artistic footprint everywhere in the popularisation of Indian natural history. It was not only practising ornithologists who were guided by his brush, the wider public encountered his work almost daily, often without ever realising it.

During the mid-twentieth century, the Government of India issued a series of beautiful

Jamshed Irani's marine paintings were used on WWF and BNHS greeting cards [Image Courtesy: Irani Family]

definitive and commemorative postage stamps depicting Indian birds. These miniature works of art travelled to every corner of the world on letters and postcards, carrying with them not only images of India's remarkable avifauna but also the artistry of J.P. Irani.

The Miniature Canvas

Irani's transition from large-format book plates to the tiny canvas of a postage stamp was a masterclass in design. To capture the diagnostic features of a Great Indian Hornbill or a Grey Peacock-Pheasant on a piece of paper measuring only a few centimetres required extraordinary economy of line and an exceptional understanding of avian morphology. Those stamps probably did more to familiarise ordinary Indians with the country's avian diversity than countless text-heavy government publications ever could.

For those of us who grew up within the BNHS family, Irani was an unseen legend. Working closely with Dr Sálim Ali at Hornbill House, he transformed field notes and museum skins into living, breathing birds on paper. It was a partnership of the highest order. Sálim Ali provided the uncompromising scientific rigour, and Irani supplied the visual language that made that science accessible to generations of Indians.

A Lifelong Visual Legacy

Looking back today, after a lifetime devoted to the study of natural history, I realise how profoundly the landscape of birdwatching has changed. High-resolution digital cameras, bird-call playback on smartphones, and sophisticated online databases have made bird identification infinitely easier than it was during my youth on the streets and outskirts of Bombay.

Yet I cannot help feeling that our growing dependence on pixels has cost us something precious. Field sketching and classical illustration demanded slow, contemplative observation. Identifying a bird by comparing it with an Irani plate meant engaging with an interpretation of its true essence, distilled by an artist who had spent countless hours studying both museum specimens and living birds in the field.

The battered field guides and the treasured volumes of the *Handbook* still occupy the place of honour on my bookshelf. Their spines are creased, and their pages have yellowed with the humidity of countless monsoons in the field. Yet whenever I open them and gaze upon the vibrant, meticulously painted birds that grace their pages, I am transported instantly to the forested tracks of Arunachal, the salt-laden air of Sriharikota, and the sheer, unalloyed joy of being a young man discovering the wonder of wings.

– Bharat Bhushan
Hon Secretary, BNHS

An appreciation of the work of J.P. Irani

Shri J.P. Irani's bird illustrations were first published in 1968, in the 8th edition of Dr Sálim Ali's BOOK OF INDIAN BIRDS, along with that of other artists. When I started birding with the help of the 10th edition, his art was the link between Dr Ali's words and the physical bird. Over the years his contribution to Dr Ali's books increased manifold. When the BNHS published the ENCYCLOPEDIA OF INDIAN NATURAL HISTORY in 1986, the front cover of its dust jacket was illustrated by Mr Irani; a heart-stopping diorama of India's wild heart. But for me, his best work is in OUR FEATHERED FRIENDS (Chopra 1984, CBT), wherein his art covered full pages, to illustrate the animate bird in its natural habitat. Like all the creatures he illustrated, Irani went about his passion without ado. And those who imbibed the wild through his art, always benefitted.

– Aasheesh Pittie
Life Member, BNHS

Exploring the library of Smithsonian Secretary Emeritus S. Dillon Ripley in 1990, J.P. Irani's illustrations were among my first acquaintances with India's dazzling avifauna. They evoked something remote and mysterious, and unexplored. They still seem to belong to a different era, and gave a promising foundation upon which his successors could build.

– John C. Anderton
Artist - 'Birds of South Asia' and ornithologist

Mr J.P. Irani – The Man Who Painted India's Birds

Mr J.P. Irani, designed the first-day cover and the commemorative stamps that the Deputy Minister for Communications, Mr D.N. Gadgil, presented to then Prime Minister Mrs Indira Gandhi. She was flanked on the dais by the Hon. Governor Idris Latif, and Dr Sálim Ali.

I think it was sometime in the early 1970s that I bought a small booklet entitled WATCHING BIRDS by Jamal Ara, published by the National Book Trust under its Nehru Library for Children series – although I was certainly no longer a child! Besides the beautifully written text, in simple English, the booklet contained delightful illustrations by J.P. Irani. Being an amateur artist myself, I remember copying many of J.P. Irani's illustrations for my own fieldwork, never imagining that I would one day meet this remarkable artist in person.

Mr J.C. Daniel introduced me to J.P. Irani sometime in the 1980s, although I no longer remember the exact year. I immediately took to both him and his wife whenever they attended BNHS functions. After I became Director, I had many more opportunities to meet them. J.P. Irani was a close friend of BNHS stalwarts such as Dr Sálim Ali, Humayun Abdulali, and J.C. Daniel among others. Mr Irani painted a beautiful portrait of Humayun Abdulali, which was installed in 2002 in the Bird and Reptile Collections of the BNHS Museum, where Abdulali had spent most of his working life.

In 1975, when the BNHS was making every effort to rediscover Jerdon's Courser – eventually rediscovered in 1986 by Bharat Bhushan – Dr Sálim Ali requested J.P. Irani to prepare illustrations of Jerdon's and Indian coursers for use as hand-held pamphlet to be distributed throughout their potential range. On July 9, 1975, J.P. Irani presented these illustrations to the Society *pro bono*, writing that they were offered "as a token of appreciation for the ever-willing help I have been getting from the Society". It is acts of generosity such as these that have helped the BNHS remain strong over so many decades.

In 2008, to commemorate the 125th anniversary of the BNHS, the Society invited the President of India, Mrs Pratibha Patil (2007–2012), to inaugurate the celebrations at the National Centre for the Performing Arts. Mr Deshmukh suggested that we should present her with a painting of hornbills for display at Rashtrapati Bhavan, but unfortunately she was unable to attend. Thus, the BNHS retained in its possesion J.P. Irani's magnificent 36 × 50-inch painting of a pair of Great Pied Hornbills perched on a branch overlooking their forest home somewhere in the Western Ghats. Today, that painting adorns the Committee Room at Hornbill House.

Mr Irani generously offered to paint Mr J.C. Daniel's portrait in 2011. The painting was unveiled in the Mammal Section of the BNHS Museum on the first anniversary of Mr Daniel's death in 2012, later, it was moved alongside that of Humayun Abdulali.

Mr Irani's association with the BNHS dates back to the 1960s, when Dr Sálim Ali was searching for an Indian artist to illustrate birds for the forthcoming HANDBOOK OF THE BIRDS OF INDIA AND PAKISTAN, which he was preparing with S. Dillon Ripley. Sometime in 1964, Dr Sálim Ali approached a sculptor through a mutual acquaintance. Although the sculptor declined the commission, he recommended a promising young artist named Jamshed P. Irani. Jamshed had already seen INDIAN HILL BIRDS by Dr Sálim Ali and admired the illustrations by G.M. Henry. He had copied several of those illustrations himself, thereby developing a keen interest in wildlife art. After corresponding with Dr Sálim Ali, he set out to meet him at his residence in Bandra during torrential monsoon rains. J.P. Irani later told me that he knew only that Dr Sálim Ali lived somewhere near the famous actor, Dilip Kumar's house in Bandra, but not his exact address. The taxi driver dropped him on the wrong side of Bandra, forcing him to walk all the way to Pali Hill in the pouring rain. By the time he reached Dr Sálim Ali's home, he was completely drenched, clutching a portfolio of oil paintings that had themselves been damaged by the rain.

Seeing the young artist's miserable condition, Dr Sálim Ali immediately invited him inside and offered him a cup of hot tea. Jamshed sat there trembling – not only because he was soaked to the skin, but also because he was overawed at meeting

Hoopoe embroidered by Jamshed Irani at the age of 82 years [Image Courtesy: Irani Family]

the legendary ornithologist. Understanding his discomfort, Dr Sálim Ali suggested that he return another day when the weather had improved.

During that second visit, Dr Sálim Ali handed him two bird specimens and asked him to paint them. Before applying colour, however, he insisted that Jamshed first produce accurate pencil drawings under his supervision. Only after he was satisfied that the body proportions, bill, legs, and overall structure were correct did he permit the young artist to take the specimens home to complete the paintings.

One of the greatest challenges in bird illustration is that, unless an artist has observed a species in the field, it is difficult to portray it convincingly from dried museum specimens alone. The posture of a living bird is often quite different from that of the stretched, cotton-filled, eyeless skins preserved in museum drawers. Illustrations based solely on museum specimens frequently fail to capture what birdwatchers call the GISS – the general impression of shape and size – which is so important for identification.

Wildlife illustration has long been recognised as a specialised art form, reaching particularly high standards in Britain and the United States, but it has remained relatively underdeveloped in India. From the 1960s onwards, J.P. Irani did much to bridge that gap.

During the mid-1960s, he produced fourteen plates for the HANDBOOK OF THE BIRDS OF INDIA AND PAKISTAN, several of which were later reproduced in the compact one-volume edition published in 1983. Dr Sálim Ali would assemble groups of study skins from the BNHS collections so that J.P. Irani could compare subtle differences between closely related species. Every illustration had to be anatomically correct and accurately proportioned.

In mid-2003, J.P. Irani completed a large portrait of Dr Sálim Ali, which today hangs in the auditorium at Hornbill House. Later that year, on November 12, 2003, in recognition of his immense contribution to Indian ornithology through his illustrations, the Committee of the Sálim Ali–Loke Wan Tho Ornithological Research Fund (SALOR), constituted by the BNHS, conferred upon him a special award.

– Asad R. Rahmani
Former Director, BNHS

J.P. Irani – India's finest natural history artist

[Image (L&R) Courtesy: Randhir Sahgal, Sanctuary Asia]

I met with J.P. Irani at Hornbill House in the early 1980s and was introduced to him by none other than Sálim Ali, President of the Bombay Natural History Society (BNHS) who said to me: "meet one of India's finest natural history artists. He will be a great asset to Sanctuary."

I was then on the Executive Committee of the BNHS and knew J.P. only from his incredible body of art works, including the books he illustrated for the National Book Trust. Given his stature, I was taken aback at J.P.'s humility when I asked him whether he would be willing to create some artworks for Sanctuary Asia's *Cub* Magazine, designed specially for children. All he said to me was, "Of course I will! Just don't rush me, because as Sálim Ali Saheb will confirm, I only do work that is true to natural history and morphology." I apologised for the modest payment we could afford. He smilingly replied: "Did I ask you for any money? I am a professional and will charge for my artworks, but I am a subscriber to your *Sanctuary Asia* magazine and I often wondered when you would start a magazine for children. I will make sure you will be able to afford me."

What a wonderful, unassuming, human being he was. A celebrity in the natural history art world, he brought life into so many of BNHS' vast collection of bird books and even designed the commemorative stamp for Sálim Ali birth centenary for the Indian Government. Needless to add, he became a good friend and all the exquisite works of art he created for Sanctuary *Cub* magazine are still up on my office wall over four decades later.

Rest well J.P. You have been one of the builders of our precious BNHS and your work will live on long after all of us are gone.

– Randhir Sahgal
Editor Sanctuary Asia & Former President, BNHS

Turning the Tide for Ujani

How One Man's Quest for Justice Sparked a Wetland Conservation Movement

Text: **Devi Waingankar and Unmesh Katwate**

Every wetland has its champions. Some are scientists, some are forest officers, and others devote their lives quietly to protecting ecosystems without ever calling themselves conservationists. At Ujani Reservoir in Maharashtra, one such individual is Mr Bharat Mallav, Chairman of the Ambika Fisheries Cooperative Society, senior journalist with *Pudhari* Marathi newspaper, and one of the most respected voices of the fishing community. For more than three decades, Bharat Mallav has worked tirelessly for the welfare of fishermen while championing the protection of Ujani's fisheries and wetlands.

Today, he is an invaluable community partner in the BNHS Wetland Eco-restoration and Fisheries Development Programme at Ujani Reservoir.

In 2008–09, Bharat Mallav led a protest against the use of mosquito nets for fishing [Image: Bharat Mallav]

His intimate understanding of the reservoir, acquired through decades of lived experience, has complemented scientific research in remarkable ways. Whether guiding the collection of native fish broodstock, identifying suitable spawning grounds, or demonstrating traditional practices such as installing bamboo-supported *hapas* for fish breeding, his practical knowledge has contributed significantly to the programme's success. His work is a testament to the enduring value of traditional ecological knowledge in modern conservation.

Mr Mallav's journey, however, began long before he became a community leader. It began with displacement.

The construction of the Ujani Dam in 1980 submerged thousands of hectares of agricultural land and several villages, forcing countless farming families to rebuild their lives. Among them was the Mallav family from Barshi–Khumbhargaon. Stripped of their agricultural livelihood, they turned to fishing as their only means of survival. Those were years of hardship, marked by poverty and uncertainty, but they also shaped a young man's determination to improve the lives of others facing the same struggles.

As he entered the fishing profession, Bharat Mallav soon realised that the greatest challenge was not catching fish, but confronting injustice.

"Fishermen worked hard," he recalls, *"but they never received a fair price. Contractors controlled the markets, commissions kept increasing, and those who depended entirely on the reservoir had very little say over their own livelihoods."*

In 1985, seeking justice for the fishing community, he travelled to Mumbai's Mantralaya. Although his appeals found little response, the visit proved transformative. While exploring the city's fish markets, he observed a transparent marketing system based on weighing scales rather than auctioning. Recognising its fairness, he resolved to introduce the same system in Bhigwan.

His first weighing scale stood beneath a Gulmohar tree, where only a handful of fishermen came to trade. The initiative struggled in its early days, but he refused to abandon the idea. He later shifted the weighing scale closer to the auction area at Takrarwadi, and gradually fishermen began embracing the new system. What began as a modest experiment eventually transformed fish marketing across the region. Today, nearly all fish brought to the market from Bhigwan, Indapur, and surrounding areas are traded by weight, bringing greater transparency and fairness to thousands of fishermen.

Mr Bharat Mallav visiting Mumbai for the first time in 1994 for injustice against fishermen in Ujani, Bhigwan [Image Courtesy: Ambika Fisheries Co-operative Society]

Yet market reform was only one chapter in a much larger struggle. During the mid-1990s, contract-based fish marketing and rising commissions placed additional financial burdens on fishing communities. At the same time, destructive fishing practices – particularly the indiscriminate use of mosquito nets by outsiders – threatened the

Bharat Mallav urged the Secretary (Irrigation), Government of Maharashtra – Mr Sanjay Belsare, to introduce a condition banning the use of mosquito fishing nets, since they remove tiny fish that serve as an important food source for migratory birds [Image Courtesy: Ambika Fisheries Co-operative Society]

Left: Bharat Mallav established the first hatchery for native fish at Ujani under the guidance of Dr Unmesh Katwate to support native fish conservation
[Image Courtesy: Ambika Fisheries Co-operative Society]

Right: Polluted waters of the Ujani reservoir in the mid-2000s; a decade later, Bharat Mallav helped organise community-managed ponds for Ganpati visarjan, reducing the direct immersion of idols and associated pollution in the reservoir
[Image Courtesy: Ambika Fisheries Co-operative Society]

reservoir's future by removing juvenile fish before they had a chance to mature.

To Bharat Mallav, these were never merely economic concerns. They were ecological ones as well.

"If we keep taking the smallest fish," he says, *"what will remain for the future? A fisherman depends on tomorrow's fish as much as today's catch."*

A protest march at Palasdev in the mid-2000s against the contract-based fishing system and alleged 22 per cent commission, calling for greater transparency and fairness for local fishing communities
[Image: Ambika Fisheries Co-operative Society]

Without formal scientific training, he understood through years of observation that unsustainable fishing practices would ultimately destroy both fish populations and the livelihoods they sustained.

By 1997, another threat had emerged. Rapid urbanisation and industrial development around the reservoir led to untreated sewage and factory effluents entering Ujani's waters. Fish mortality became increasingly frequent, and water quality continued to deteriorate. Refusing to remain silent, Bharat Mallav mobilised nearly 3,000 people from Bhigwan in a public march, demanding action against pollution and drawing attention to the declining health of the reservoir.

His activism, however, came at a personal cost. His opposition to powerful contractors and exploitative market systems made him a target. During one confrontation in the late 1990s, he was brutally assaulted with metal chains while working in the fish market, leaving him unconscious. Even after recovering, he continued his fight through legal channels and public campaigns, refusing to allow intimidation to silence him.

Alongside fellow community leaders, including Mr Chandrakant Bhoi, he organised protests, represented fishermen before government authorities, and persistently advocated for reforms. Their collective efforts eventually contributed to important changes in fish market governance, reducing the influence of private contractors and strengthening the role of the Fisheries Department.

Despite these achievements, Bharat Mallav believes the work is far from complete. Illegal fishing practices continue, reliable records of fish landings remain inadequate, and effective fisheries management still demands stronger governance, scientific monitoring,

Left: Bharat Mallav persuaded the Government of Maharashtra to release fish seed into the Ujani reservoir to support the recovery of fish stocks and the livelihoods of local fishing communities.
[Image Courtesy: Ambika Fisheries Co-operative Society]

Right: Bharat Mallav and Dr Unmesh Katwate examining the broodstock of the endemic Deccan Mahseer received at the hatchery to breed this threatened native fish
[Image Courtesy: Ambika Fisheries Co-operative Society]

and meaningful participation by local communities. He often emphasises that it is the traditional fishing practices of local fishermen that have helped sustain Ujani's fisheries despite mounting pressures.

"Our fight is not against nature," he says. *"Rivers, fish, and wildlife never fight us. Human beings fight only other human beings."*

These words reflect a lifetime devoted to protecting both people and nature. Although he never received formal scientific training, many of the concerns he raised decades ago – pollution, destructive fishing practices, habitat degradation, and sustainable fisheries management – are now recognised as central challenges in freshwater conservation.

The partnership between BNHS and Bharat Mallav demonstrates the power of bringing together scientific research and traditional ecological knowledge. The success of the BNHS Wetland Eco-restoration and Fisheries Development Programme at Ujani Reservoir has shown that long-term conservation cannot be achieved through science alone. It depends equally on the wisdom, commitment, and stewardship of local communities. Throughout the programme, Bharat Mallav has generously shared his experience – from guiding broodstock collection and traditional fish breeding techniques to supporting habitat restoration and community engagement – making him an indispensable partner in conservation.

For the fishing communities of Ujani, Bharat Mallav is far more than the Chairman of a cooperative society or a journalist. He is a custodian of the reservoir, a steadfast advocate for its people, and a bridge between generations of traditional knowledge and modern conservation science. His story reminds us that lasting conservation is built not only in laboratories and research institutions, but also through the courage, resilience, and lived experience of those who have devoted their lives to protecting the landscapes they call home.

Devi Waingankar is passionate about the conservation of aquatic ecosystems and is currently working as a Project Scientist at the BNHS.

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Trogon Yatra

Text: **Vijaya Bharat**

I saw my first trogon in the forests of Thattekad, Kerala. The bird was perched high in a tree, perfectly still, its fiery red plumage arresting enough to make me pause in awe. It was a special moment, as until then I had only seen an image of the Malabar trogon, featured on the cover of *Keralithile Pakshigal* (*Birds of Kerala*) by Prof. K.K. Neelakantan (Induchoodan), my uncle. The male – distinguished by its black head and neck, a white-edged black bib, finely pencilled black lines on the wings, and a relatively long tail marked in black and white – remained on the

Malabar Trogon in canopy
[Image: Vijaya Bharat]

same perch long enough for close observation. The female, nearby, was a subtler counterpart, in olive green and brownish-orange tones.

Two years later, on a birding trip to Arunachal Pradesh, I encountered my second trogon: Ward's trogon (*Harpactes wardi*). Deep within the forest and in low light, I only just managed to spot it. Even so, the distinguishing features were clear: there was no dividing margin between the purplish bib and the red underbelly. The female showed yellow underparts. Our guide remarked that spotting one more trogon would complete the list of Indian species. I realised I was on the cusp of completing my own 'trogon yatra'.

That moment came during a recent visit to Lalpanchour in West Bengal. On the very first day, within the first hour, our group observed a male red-headed trogon (*Harpactes erythrocephalus*) perched clearly at almost eye level. The entire front – head and neck included – was a vivid red. A female on a nearby branch displayed the characteristic duller shades of olive green and brownish orange. Across all three species, I noted the presence of distinct blue eye-rings. Seeing all of India's trogons brought a deep sense of accomplishment.

The name 'trogon' derives from Greek, meaning 'to nibble', a reference to the bird's habit of gnawing at decaying wood to excavate nesting cavities. I observed this unusual nesting behaviour in Thattekad.

Left: Malabar Trogon Male [Image: Anil Kumar]
Right: Malabar Trogon Female [Image: Vijaya Bharat]

Left: Ward's Trogon Male
[Image: Jyotirmay Baishya]
Right: Ward's Trogon Female
[Image: Clement Francis]

as *Lal matha kuchkuchi* or simply *Lal trogon*. The genus name derives from the ancient Greek *harpactes*, meaning 'robber', referring to the birds' stout bodies, strong hooked bills, and insectivorous habits.

Trogons are largely sedentary birds, with weak legs, and are not inclined to fly frequently or to forage on the forest floor. Their bright plumage contrasts with a comparatively dull back, and they often face away from an observer, using this subdued colouring as effective camouflage. Their toe arrangement is unique: trogons are the only birds with a heterodactyl configuration, in which toes I and II face backwards, and III and IV forwards, with toe II reversible. By contrast, the more familiar zygodactyl arrangement – seen in woodpeckers, parrots, owls, and Trogons, along with the brilliantly coloured, blue-green South American quetzals – renowned for their elaborate tail feathers – belong to the order *Trogoniformes*, which comprises a single family, *Trogonidae*. There are 49 species across seven genera, all inhabiting tropical forests.

India hosts three species of the genus *Harpactes*: the Malabar trogon (*Harpactes fasciatus*), known as *Thee kakka* ('fire crow') in Malayalam and *Kafni churi* ('fakir's robe') in Hindi; Ward's trogon (*Harpactes wardi*), known in Assamese as *Kathoni bowari* ('bride of the forest' or 'forest weaver'), with the species name honouring the English botanist Francis Kingdon-Ward, who first brought it to scientific attention; and the red-headed trogon (*Harpactes erythrocephalus*), known in Bengali

Left: Red-headed Trogon Male [Image: Tapas Kumar Barman]
Right: Red-headed Trogon Female [Image: Tapas Kumar Barman]

cuckoos – has toes I and IV facing backwards, II and III forwards, and toe IV reversible.

Many birders set themselves targets, such as observing or photographing all bird species in India, or reaching milestones like 1,000 species. I take satisfaction in having achieved my personal goal of observing all three Indian trogon species across widely separated regions: the Western Ghats in Kerala, the Mishmi Hills in Arunachal Pradesh, and the Sukna forests in the Himalayan foothills within Mahananda Wildlife Sanctuary, West Bengal.

Trogons are ancient birds, with fossil records dating back approximately 49 million years. By comparison, fossils attributed to *Homo sapiens* are far more recent. Today, alongside climate change, human activity is altering biodiversity at an unprecedented rate. Conservation efforts must therefore go beyond general measures and focus on protecting the specialised habitats required by species such as trogons. It is difficult to justify a scenario in which humans – relative newcomers to the planet – drive other species to extinction through indiscriminate and irresponsible behaviour. There is, now more than ever, an urgent need to prioritise coexistence.

Vijaya Bharat is a consultant cardiologist and nature enthusiast in Jamshedpur. She has authored a book on the FLOWERING TREES OF JAMSHEDPUR and contributes articles to newspapers and magazines.

Challenging the Eco-sensitivity of the Sahyadris?

Text: **Kishor Rithe**

Several tigers from central India have recently been translocated to the Sahyadri Tiger Reserve (STR), and they appear to be adapting well to the forests of the Western Ghats (Sahyadri mountain range), one of the world's richest biodiversity hotspots.

A collared tiger in the forests of Sahyadri Tiger Reserve [Image: Rohan Bhate-Shah]

Studies have suggested that tigers breed in the Tillari forests and disperse northwards through the Western Ghats to the Chandoli–Koyna landscape of the STR, as well as to adjoining tiger habitats in Karnataka and Goa. To strengthen the tiger population in the STR, several tigers from central India were recently translocated and released into the reserve.

On November 20, 2025, the tigress Chanda (STR-04) was released into the core area of Chandoli National Park (NP). On December 13, 2025, another tigress, Tara (STR-05; T7 [S2]), was released in the Park. Five days later, on December 18, 2025, she left her acclimatisation enclosure and entered the core forest. Both tigresses were fitted with radio collars, enabling STR authorities to monitor their movements and behaviour. During the past six months, both animals appear to have adapted successfully to the Sahyadri landscape.

Encouragingly, two breeding tigresses have also recently been reported near the proposed Paonar–Pannadevi Shaktipeeth Expressway in Sindhudurg District. For wildlife activists and conservation practitioners working across the Sahyadri landscape, this represents the fulfilment of a long-held dream. Achieving this

Tara, the tigress, was released into Chandoli National Park in the Sahyadri Tiger Reserve (STR) and has now successfully established her territory there. She crossed the backwaters of the Chandoli reservoir, swimming nearly 2 km to reach the Zolambi Beat, where she has since established her territory [Image: Archana Kaulagekar]

milestone required overcoming numerous ecological, administrative, and political challenges.

The National Tiger Conservation Authority (NTCA) was initially reluctant to approve the Sahyadri Tiger Reserve because there were very few confirmed records of resident tigers in the region. Another major challenge was the rugged, mountainous terrain and the submergence of much of the flatter landscape following the creation of the Koyna Reservoir, which limited the availability of productive habitat capable of supporting abundant prey populations.

The first obstacle was overcome when the then Union Minister, S. Raghupathy, agreed to consider 423.55 sq. km of Koyna Wildlife Sanctuary (WS) together with 317.37 sq. km of Chandoli National Park for designation as a tiger reserve. The NTCA accepted the recommendations of officers of the Indian Forest Service (IFS) in Maharashtra and subsequently notified the area as a Tiger Reserve. In January 2010, a total of 741.22 sq. km area was notified as the core, or Critical Tiger Habitat (CTH).

I was fortunate to serve on the expert committee constituted to delineate both the Core (CTH) and the Buffer of the STR. During one of the buffer delineation meetings, I was surprised to observe Forest Department officials consulting local political leaders to secure their consent for including proportionate areas within the buffer. Despite considerable efforts, consensus on the buffer boundaries could not initially be achieved. Subsequently, however, the Forest Department succeeded in convincing the political leadership, and a buffer area of 565.45 sq. km, encompassing 80 villages, was notified. The final buffer notification was issued on 5 January 2010.

This achievement, however, was accompanied by a setback. Local political representatives demanded the denotification of 98 sq. km from the Koyna Wildlife Sanctuary. The proposed denotified area largely comprised private forests and cultivated lands spread across 14 villages on the Deccan Plateau side of the Koyna Reservoir. In 2012, the State Government submitted the proposal with an assurance to the National Board for Wildlife (NBWL) that an equivalent extent of inviolate habitat, free from human settlements, would be provided to the Tiger Reserve. Since the NTCA recommends that breeding tiger populations require approximately 800–1,000 sq. km of inviolate habitat, the NBWL approved the denotification proposal.

The Maharashtra Government honoured this commitment. Over the past decade, ten of the twelve villages within the Koyna Wildlife Sanctuary and all nineteen villages within Chandoli National Park have been voluntarily relocated, thereby creating additional inviolate habitat for tigers. Even so, approximately 570 families continue to reside within the core area of the STR – 407 families in Chandoli and 163 in Koyna.

The creation of larger inviolate areas has contributed significantly to the recovery of prey populations within the reserve. This, in turn, has encouraged dispersing tigers to establish territories in the STR. The improved habitat conditions also gave forest managers the confidence to undertake the experimental translocation of tigers into the reserve.

Conservation efforts have extended beyond the Tiger Reserve itself. The Maharashtra Government has recently notified Tillari, Amboli–Dodamarg, Chandgad, Ajara–Bhudargad, Gaganbawada, Panhalgad, Masai Pathar, and Vishalgad as Conservation Reserves. Collectively, these protected areas encompass tropical evergreen forests, semi-evergreen forests, moist deciduous forests, Myristica swamp patches in valley bottoms, lateritic plateaus such as Masai Pathar, riverine forests, and high-altitude grasslands.

The Ajara–Bhudargad Conservation Reserve, renowned for its semi-evergreen forests in Kolhapur district, forms an important wildlife corridor connecting the Chandgad forests with the Radhanagari Wildlife Sanctuary. Likewise, the Gaganbawada forests, which receive exceptionally high rainfall and support a rich assemblage of endemic flora and fauna, constitute another vital wildlife corridor in the region.

Together, this network of protected areas and wildlife corridors has significantly strengthened ecological connectivity between the Sahyadri Tiger Reserve and the Radhanagari Wildlife Sanctuary. These landscapes support not only tigers but also a remarkable diversity of wildlife, including leopards, dholes (Indian wild dogs), sloth bears, gaur, sambar, barking deer, mouse deer, Malabar giant squirrels, Indian giant flying squirrels, Indian pangolins, king cobras, Malabar pit vipers, Malabar gliding frogs, great hornbills, Malabar grey hornbills, Nilgiri wood pigeons, and numerous endemic birds, reptiles, amphibians, and butterflies.

The Tiger Conservation Plan (TCP) was prepared in 2013 for a ten-year period, with special emphasis on the management of the Core, Buffer, and, most importantly, the ecological corridors linking the Sahyadri Tiger Reserve with the Radhanagari (Dajipur) Wildlife Sanctuary, in accordance with NTCA guidelines. The NTCA had also clarified that the entire notified buffer of a Tiger Reserve should be treated as an Eco-Sensitive Zone (ESZ).

While tiger conservation planning was progressing under the Wildlife (Protection) Act, 1972, as amended in 2006, another major policy debate was unfolding around the conservation of the Western Ghats under the Environment (Protection) Act, 1986, and directions issued by the Hon'ble Supreme Court. The then Union Minister for Environment and Forests, Jairam Ramesh, proposed the concepts of "Go Areas" and "No-Go Areas" for development activities within the Western Ghats.

The Western Ghats extend across Gujarat, Maharashtra, Goa, Karnataka, Kerala, and Tamil Nadu, making the implementation of Supreme Court

The Koyna Reservoir has submerged much of the valleys within the Koyna Wildlife Sanctuary. While it has transformed the landscape, this expansive water body is expected to provide a new lease of life for the sanctuary's wildlife [Image: Kishor Rithe]

directives and the notification of Eco-Sensitive Areas (ESAs) a complex inter-state exercise. As multiple states attempted to implement the provisions of the Environment (Protection) Act and the Supreme Court's directions, widespread confusion emerged over the distinction between Eco-Sensitive Areas (ESAs) and Eco-Sensitive Zones (ESZs). This confusion was further amplified by sustained misinformation campaigns, particularly from stakeholders associated with the mining sector. Many villagers came to believe that inclusion within an ESA or ESZ would severely restrict development opportunities and adversely affect their livelihoods.

The resulting controversy over the "Go–No-Go" approach eventually led to the constitution of the Western Ghats Ecology Expert Panel, popularly known as the Gadgil Committee, to examine the issue. Instead of simultaneously introducing an attractive development package for villages falling within proposed ESAs and ESZs, both the Central and State Governments primarily pursued the notification process through the Gadgil Committee, and subsequently through the Kasturirangan Committee. This approach intensified public apprehensions and prolonged the debate over conservation and development in the Western Ghats.

The Gadgil Panel Report (2011)

The Western Ghats Ecology Expert Panel (WGEEP), chaired by Madhav Gadgil, submitted its report to the

Waterfalls in Sahyadri Tiger Reserve – the monsoon beauty of this protected landscape
[Image: Kishor Rithe]

Ministry of Environment and Forests (MoEF) in 2011, recommending stronger environmental protection for the Western Ghats.

The panel recommended that the entire Western Ghats be treated as an ecologically sensitive region, recognizing that the entire mountain range is of immense environmental significance. However, acknowledging that different areas require different levels of protection, the report proposed a three-tier system of Ecologically Sensitive Zones (ESZs):

ESZ 1: Highest level of protection, with strict restrictions on mining, large dams, and highly polluting industries.

ESZ 2: Moderate protection, allowing more activities but under stricter environmental regulation.

ESZ 3: Least restrictive, permitting greater development while ensuring compliance with environmental safeguards.

In essence, the report advocated protecting the entire Western Ghats through a graded system of ecological safeguards, with the strongest protection for the most fragile areas and a significant role for local communities in determining how development should proceed.

The report recommended banning or phasing out environmentally destructive activities in the most sensitive areas, including new mining, quarrying, sand mining, and highly polluting "red category" industries in ESZ 1.

The committee also emphasized decentralized environmental governance by promoting decision-making through village-level institutions rather than relying solely on the central and state governments. It sought to integrate conservation with sustainable livelihoods by encouraging environmentally compatible activities such as sustainable agriculture, eco-tourism, and other nature-based livelihood options. In addition, the report recommended the establishment of a statutory authority to coordinate conservation and development across the Western Ghats.

The Kasturirangan Report (2013)

The High-Level Working Group (HLWG), chaired by K. Kasturirangan, was constituted following concerns over the Gadgil Report's recommendations. It proposed a more balanced approach that sought to reconcile environmental conservation with developmental needs.

The committee distinguished between:

Natural landscapes (forests and wildlife habitats), which should receive strict protection; and

Cultural landscapes (settlements, agricultural lands, and plantations), where economic activities could continue.

The report recommended prohibiting new mining and quarrying, thermal power plants, highly polluting "red category" industries, and large construction projects beyond specified thresholds within the ESA. At the same time, it clarified that existing agriculture, tea, coffee, and rubber plantations, as well as established human settlements, would not be disturbed, thereby addressing widespread concerns that farmers would be displaced or lose their livelihoods.

Eco-Sensitive Zone (ESZ) Notifications in Maharashtra

Nearly every National Park (NP), Wildlife Sanctuary (WS), Conservation Reserve (CR), and Tiger Reserve (TR) in Maharashtra now has either a final Eco-Sensitive Zone notification or a recently amended notification. ESZ notifications have been finalized for: Bor Tiger Reserve (2022), Katepurna Wildlife Sanctuary (2021), and Thane Creek Flamingo Wildlife Sanctuary (2021). The ESZ notifications for Sanjay Gandhi National Park and Bhimashankar Wildlife Sanctuary have also been issued and subsequently amended.

The Western Ghats are recognized as both a UNESCO World Heritage Site and one of the world's most important biodiversity hotspots. In addition, Maharashtra has recently notified the Vishalgad Conservation Reserve and Panhalgad Conservation Reserve, while the Masai Pathar Conservation Reserve lies along the same mountain range immediately east of the proposed mining

Sawarde village in Radhanagari Wildlife Sanctuary, surrounded by hills, is affected by crop raiding by gaurs and awaits relocation [Image: Kishor Rithe]

leases. These conservation reserves are ecologically connected to the forest lands proposed for diversion. Local conservation organizations have therefore argued that, given the fragmented nature of these habitats, the additional forest areas should be incorporated into the existing Conservation Reserves rather than diverted for mining.

Status of the Western Ghats ESA in Other States

The notification of the Western Ghats Ecologically Sensitive Area remains challenging because it covers an extensive landscape spread across six states – Gujarat, Maharashtra, Goa, Karnataka, Kerala, and Tamil Nadu. Progress has therefore varied from state to state. After long negotiations and several iterations, MOEF&CC has finally issued a gazette notification seventh time on July 27, 2027 and convinced the state Government to agree with the following 56,825 sq. km. area as ESA.

Sr. No.	State	WG ESA (Sq.km.)
1	Gujrat	449
2	Maharashtra	17,340
3	Goa	1461
4	Karnataka	20668
5	Tamil Nadu	6914
6	Kerala	9993.7
	Total	**56825.7**

Status of ESZ Notifications Around Protected Areas

Unlike the Western Ghats ESA notification, the declaration of Eco-Sensitive Zones around Protected Areas is mandatory under existing environmental regulations. Consequently, the process of notifying ESZs around National Parks, Wildlife Sanctuaries, and the core areas of Tiger Reserves has progressed steadily across all six states.

The current situation demonstrates that Protected Areas (PAs) throughout the Western Ghats in all six states already enjoy legal protection through Eco-Sensitive Zone notifications. However, many ecologically significant landscapes lying outside the PA network – including wildlife corridors, biodiversity-rich forests, and habitats identified as ESZ-I and ESZ-II under the Gadgil Committee recommendations—continue to lack equivalent protection. Even within the approximately 37 percent of the Western Ghats proposed for protection under the Kasturirangan Report, several forest areas have been challenged for exclusion. Outside this notified landscape, there are continuing demands to exempt additional areas from environmental regulation in order to facilitate mining, industrial development, and other infrastructure projects.

Kishor Rithe, Director, BNHS, has been working for wildlife conservation through sustainable livelihoods, conservation action, advocacy, and policy for over three decades.

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